A

# COMPLETE DICTIONARY

OF

# MUSIC

AMS PRESS
NEW YORK

A

# COMPLETE DICTIONARY

OF

# M U S I C.

CONSISTING OF

A copious Explanation of all Words neceſſary to a true Knowledge and Underſtanding of

M U S I C.

---

Tranſlated from the Original French of

J. J. ROUSSEAU.

---

By WILLIAM WARING.

---

SECOND EDITION.

---

LONDON,

PRINTED FOR J. MURRAY, N°. 32, FLEET-STREET; AND LUKE WHITE, DUBLIN.

MDCCLXXIX.

Library of Congress Cataloging in Publication Data

Rousseau, Jean Jacques, 1712-1778.
A complete dictionary of music.

Reprint of the 1779 ed. published by J. Murray, London.
1. Music—Terminology. I. Waring, William, tr.
ML108.R82 1975 780'.3 72-1664
ISBN 0-404-08335-8

Reprinted from the edition of 1779, London
First AMS edition published in 1975
Manufactured in the United States of America

AMS PRESS INC.
NEW YORK, N. Y. 10003

WELSH COLLEGE LIBRARY MUSIC & DRAMA

# MUSICAL DICTIONARY.

## A

A BATTUTA. Vide TIME.

A MI LA, or, A LA MI RE, or ſimply A, the ſixth note of the natural and diatonic Gamut, which is alſo indifferently called LA.

A TEMPO, This expreſſion is of a ſimilar ſignification to a Battuta, and is uſed when following a Recitative, to denote the place where one ſhould begin to ſing in time.

ACADEMY OF MUSIC, or MUSICAL ACADEMY, By this name, formerly in France, and ſtill in Italy, were called an aſſembly of Muſicians, or of Dilettantes, that is to ſay, thoſe who frequented Concerts for pleaſure only, to which the French have ſince given the name of Concertos. Vide CONCERTO.

ROYAL MUSICAL ACADEMY, Is a title which is ſtill borne by the Opera of Paris. I will not here make any mention of this celebrated eſtabliſhment, unleſs, that amongſt all the Academies of that kingdom, or of the world in general, *that* may, aſſuredly, lay the greateſt claim to fame. Vide OPERA.

ACCENT, By this name is called, according to the moſt general acceptation, every modulation of the voice, while ſpeaking, during its continuance, or in the ſound of the ſyllables, and words, of which the diſcourſe is compoſed, which denotes an exact uniſon between the two variations of the Accents, and the two diviſions of Melody.

AC, That is to ſay, the Rhyme, and the Muſical Harmony. Accentus, ſays the Grammarian Sergius in Donatus, is, as it were, ad Cantus. There are as many different Accents, as there are methods of modulating the voice thereunto, and there are as many various kinds of Accents as there are general cauſes for ſuch modulations. In common diſcourſe, there are diſtinguiſhed three of theſe kinds, to wit, the Grammatical Accent which confines the rule of Accents, properly ſo called, by which the ſound of the ſyllables is grave or acute, and that of the quantity, by which each ſyllable is ſhort or long: Secondly, The Logic or Rational Accent, which, by many, is confuſedly intermixed with the foregoing: This ſecond kind of Accent, de-

noting the relation, the leſſer or greater connection, that Propoſitions or Ideas have between themſelves, is marked chiefly by Punctuation. Laſtly, The Pathetic, or Accent of Oratory, which, by different variations of the voice, by a tone more or leſs elevated, by a method of diſcourſe quicker, or more ſlow, expreſſes thoſe ſentiments which agitate the ſpeaker, and communicates them to the audience. A ſtudy of theſe various Accents, and of their uſes in language, ſhould be the main buſineſs of a muſician; and Dennis of Halicarnaſſus, looks, with juſtice, on Accent in general, as the foundation of every branch in muſic: For which reaſon, we alſo ought to admit as an inconteſtible maxim, that a greater or leſs degree of Accent, is the real cauſe which renders language more or leſs muſical; for what relation could muſic bear to diſcourſe, were not the modulations of the ſinger an imitation of the verbal Accents. From whence it follows, that the leſs quantity a language has of ſuch like Accents, more the harmony thereof muſt be monolonized, languiſhing, and diſguſtful, unleſs it ſeeks, in the height and force of ſounds, thoſe charms which cannot be found in their variety.

In regard to the Pathetic and Oratorical Accent, which is the moſt principal object of the imitative muſic of the theatre, no one can oppoſe the maxim which I have juſt lain down, that every man being ſubject to the ſame paſſions, ought to have a ſimilar expreſſion of them; for the univerſal Accent of nature, which draws from every man inarticulate ſounds, is one thing, and the Accent of language, which produces an harmony peculiar to a nation, is another. The difference of a greater or leſs imagination or ſenſibility which may be diſtinguiſhed between one people and another, ought of itſelf to introduce an infinite variety in the accented idioms of a tongue, if I have liberty to expreſs myſelf thus. The German, for example, raiſes equally and roughly his voice, when in a rage, he cries ever in the ſame tone; the Italian, whom a thouſand different motions agitate quick and ſucceſſively from the ſame cauſe, varies his voice in a thouſand different ſtrains. The ſame foundation of paſſion directs *his* ſoul; but what a variety of expreſſion in his Accents and his language! Moreover, 'tis to this variety alone, when the muſician knows the imitation of it, that he owes the energy and beauty of his Cantata. Unluckily all theſe different Accents, which are perfectly concordant in the mouth of an orator, are not ſo eaſy to collect under the pen of a muſician, already ſo reſtrained by the particular rules of his art. There is no doubt to be made, but that the moſt perfect, or at leaſt the moſt expreſſive muſic, is *that* wherein all the Accents are obſerved with the greateſt nicety; but what renders this aſſemblage ſo difficult, is, that too many rules in this art are ſubject to a mutual

tual contrariety, and are ſo much the more contrary, as the language is leſs muſical, for none is perfectly ſo, otherwiſe thoſe who uſe it would ſing, inſtead of ſpeaking.

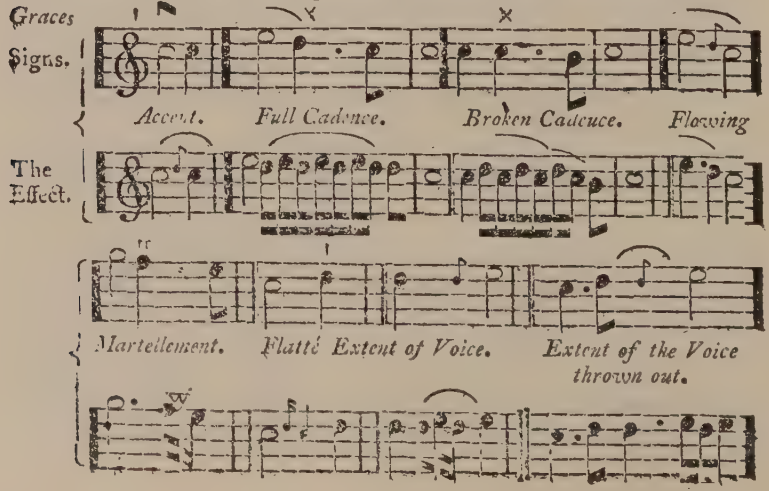
This great difficulty in following, upon truſt, the rules of all the Accents, obliges then often the compoſer to give the preference to one or the other, according to the different kinds of muſic of which he is beating. For example, the airs of dancing require particularly an Accent of rhyme and cadence, the nature of which is in every nation determined by the language. The Grammatical Accent ought to be the firſt conſulted in the Recitative, to render the pronunciation of the words more articulate, which is uſed to be loſt through the volubility of the diſcourſe, in the harmonic ſound; but that Accent which expreſſes the paſſion, claims the precedence in its turn in dramatic airs; and both are ſubordinate, particularly in ſymphony, to a third kind of Accent, which might be ſtiled muſical, and is in ſome reſpects determined by the nature of that melody which the muſician wiſhes to appropriate to the words.

In fine, the firſt and chief deſign of every kind of muſic, is to pleaſe the ear, wherefore every air ſhould have an agreeable note: herein lies the firſt law, which is never ſuffered to be violated.—It is neceſſary then, firſt to conſult the harmony and the muſical Accent in the compoſition of any air whatſoever; then, ſhould our deſign be a dramatic and imitative Cantata, we muſt ſeek the Pathetic Accent, which gives to each ſentiment its proper expreſſion, and the rational Accent, by the aſſiſtance of which, the muſician enters with juſtice into the ideas of the poet; for to inflame others with that warmth, wherewith ourſelves are animated in ſpeaking to them, we muſt make *them* comprehend what is the ſubject of our diſcourſe. The Grammatical Accent is neceſſary for the ſame reaſon; and this rule, though placed here the laſt in order, is not leſs indiſpenſable than the two former, ſince the ſenſe of propoſitions and phraſes depends entirely on that of words. But the muſician who underſtands his language, has ſeldom occaſion to be attentive to this Accent; he cannot ſing his air without perceiving if he ſpeaks ill or well; and it is ſufficient that he knows, that it is always neceſſary to ſpeak well. Happy is it always, when a flowing and flexible melody never ceaſes to unite itſelf to the natural exigencies of language. The French muſicians in particular, have aſſiſtances, which in this caſe render their errors unpardonable; and above all, the Treatiſe on the French Roſody, by Monſ. L'Abbi d'Olivet, which every one ſhould conſult. Thoſe, who will be in a condition to raiſe themſelves to a higher ſphere, ſhould ſtudy the Grammar of Port Royal, and the ingenious notes of the philoſopher who has commented on it: then, by building the experiments on the rules, and the rules on their principles,

principles, they will be always certain of what they ſhould do in the management of the Grammatical Accent in every ſhape.

In regard to the two other kinds of Accents, they can be reduced into a leſſer number of rules, and the practice of them requires leſs ſtudy, and more genius. There cannot be found any kind of Sang-froid in the language of the paſſions; and it is a well known truth, that to inſpire another with feeling, we muſt feel ourſelves. Nothing then can, in the ſearch of the Pathetic Accent, ſupply the place of that natural fire, which awakens at pleaſure every ſentiment; and there is no other art in this caſe neceſſary, but to light up in one's own ſoul, that flame, which we wiſh to convey into the hearts of others. (Vide FIRE.) Is the rational Accent the object of our concerns? Art has but little to do in the acquiring of it, for this reaſon, that the deaf cannot be taught to hear. It muſt be confeſſed alſo, that this Accent is, in a leſs degree than the others, the reſult of muſic, becauſe muſic is much more the language of the ſenſes than of the mind. Give then a number of images, or ſentiments, and few ſimple ideas, to be diſcuſſed by the muſician, for it is the paſſions alone that ſing, the underſtanding conſiſts but in the ſpeech.

ACCENT, A kind of mark in the French ſinging, which was formerly affixed to the muſic, but which at preſent the maſters of the Gout du Chant, or Parte in ſinging, mark with pencil only, until the ſcholars underſtand themſelves the method of placing it. This Accent is only uſed on a long ſyllable, and ſerves as a conveyance from one note thus marked to another note without this mark, placed upon the ſame degree. It conſiſts in an elevation of the throat, which raiſes the ſound a degree, to give, in that inſtant, the following note the ſame ſound which it has left. Many have given the name of Plainte to this Accent. Vide the Sign and Effect of the ACCENT.



ACCENTS, The poets often uſe this word in the plural to ſignify the ſong itſelf, and ordinarily adjoin to it an epithet, as ſweet, tender, mournful Accents. In this caſe, this word receives exactly the ſenſe of its root, from whence ariſes the derivation; for it is formed from Canere, Cantus, whence is derived Accentus, as well as Concentus.

ACCIDENT, ACCIDENTAL, We call accident, or accidental ſigns, the B mollare's, the Dieſis's, or B Quadrato's, which are met with by accident in the courſe of an air, and which, conſequently not being at the key, have no relation to the mode or principal ſyſtem. (Vide Dieſis, B mollare, Mode, Cleff or Key.) We call alſo accidental or ledger lines, thoſe which are added above or below the uſual horizontal five, to fix the notes which are beyond their limits. Vide LINE.

ACCOMPANIST, He, who in a Concert, accompanies the band with the organ, the harpſichord, or any other accompanying inſtrument. Vide ACCOMPANYING.

It is abſolutely neceſſary, that a good accompaniſt be a ſkilful muſician; that he be acquainted with the foundation of harmony; that he know perfectly his ſyſtem of muſic; that he have a ſenſible ear, pliant fingers, and a well founded taſte.

'Tis the buſineſs of the accompaniſt to fix the key for the voices, and to give the change of motion to the orcheſtra. The firſt of theſe offices requires him to have always under the finger the note of muſic, to reſtrike it when neceſſary, and to raiſe or ſet right the voice when it weakens, or is bewildered. The ſecond requires him to ſtrike the baſs; and his accompanying with a firm ſtroke, equal lain out, and well regulated on each ſide, for the purpoſe of rendering the muſicians ſenſible of the time, particularly in the beginning of airs.

In the three following articles may be found thoſe details which are wanting in the preſent.

ACCOMPANYING, Is the execution of a complete and regular harmony on an inſtrument proper for rendering it ſo, viz. the organ, the harpſichord, the theorbo, the guittar, &c. &c. We will take here, as an example, the harpſichord, as it is the only inſtrument continued in uſe for accompanying.

There is given, as a direction, one of the parts of muſic, which is ordinarily the baſs. That baſs muſt be touched with the left-hand, and with the right the harmony expreſſed by the tone of the baſs, by the melody of the other parts, which are playing at the ſame time, by the partition which is placed before the eyes, or by the cyphers which are found added to the baſs. The Italians hold the cyphers in contempt, the partition itſelf is of little ſervice to them; the quickneſs and nicety of the ear ſupplies their place, and they accompany extremely well without

without all this preparation: but it is to their natural diſpoſition alone that they are indebted for this facility; and another people, not born to muſic like themſelves, find in the execution of the accompanying, ſeveral difficulties almoſt inſurmountable. Eight or ten years are neceſſary for ſucceeding therein in any tolerable degree. What then can be the cauſes that retard, in this manner, the advancement of young practitioners, and embarraſs, for ſo long a time, the maſters, unleſs the difficulty of the art alone is the occaſion of it? There are two principal reaſons: the one lies in the method of marking the cyphers on the baſs; the other, in the manner of the accompaniment. Let us firſt treat of the former.

The ſigns which are made uſe of for the purpoſe of forming the cyphers on the baſs, are far too numerous. Since there are ſo few fundamental concords, why are ſo many cyphers neceſſary to expreſs them? Theſe ſame ſigns are equivocal, obſcure, inſufficient: for example, they very ſeldom determine the nature of the intervals which they expreſs, or what is worſe, they denote thoſe of another nature. We fix a bar to the one to mark the Dieſis's, and to others, to mark the B mollare's. The major and ſuperfluous intervals, and even the deminiſhed, are often expreſſed in the ſame manner. When the cyphers are double, they are too confuſed, when ſingle, they very ſeldom expreſs more than the idea of one interval alone; ſo that we have always a great number to underſtand and to determine. But how can we remedy theſe inconveniences? Muſt it be neceſſary to increaſe the number of ſigns to expreſs each part? But the complaint is, that there are already too many. Should we reduce them? In that caſe, we ſhall leave more things for the accompaniſt to gueſs at, who is already too much embarraſſed; and provided we go ſo far as to make uſe of cyphers, they ſhould be of ſuch a nature as to expreſs every thing. What then is to be done? Should we invent new ſigns, render the method of placing the finger more perfect, and from thoſe ſigns, and that poſition of the finger, compoſe two united methods which combine in aſſiſting the accompaniſt? That is what Monſ. Rameau has attempted with great ſagacity, in his Diſſertation on the different Methods of Accompanying. We will point out, under the words cypher and to finger, the means which he propoſes. Let us paſs on to the methods.

As the ancient muſic was not compoſed on the ſame plan as ours, neither for the ſong, nor its harmony, and as there was no other baſs but the fundamental, the whole accompaniment conſiſted only in a ſeries of perfect accords; in the which, the accompaniſt ſubſtituted, from time to time, ſome ſixth to the fifth, according as the ear required: they knew no farther. At preſent,

ſent, ſince they have changed the modulations, overturned each ſeparate party, ſurcharged, perhaps, ſpoiled, the harmony by a quantity of diſcords, we are obliged to purſue a different rule. Campion gave the preference, it is ſaid, to the rule of the octave, (Vide Rule of the OCTAVE) and, according to this method, many maſters ſtill teach at preſent the accompaniment. The concords are determined by the rule of the octave, according to the rank which is held by the notes of the baſs, and to the courſe which they follow in a given tone. Therefore the tone being known, the note of the baſs continues known alſo. The rank of this note in the tone, the rank of the note that immediately precedes it, and the rank of the note that follows it, if accompanied by the rule of the octave, cannot lead us into any great error, provided that the compoſer has followed the moſt ſimple and moſt natural harmony; but that is what we ought rarely to expect in the preſent muſic, as hardly in Italy itſelf does the harmony appear to increaſe its ſimplicity, in proportion as it leſſens it elſewhere. More than this, what method muſt we follow to have theſe things continually preſent? And whilſt the accompaniſt is inſtructing himſelf, what becomes of the fingers? Hardly have we formed an idea of one Accord, but there preſents itſelf another, and the inſtant of our reflection is preciſely that of execution.

There is but one determined method in muſic, one reflected experience, i. e. the facility of reading a line of muſic in the caſt of the eye, which can be of ſervice at this time. And ſtill the moſt ſkilful are often deceived with this aſſiſtance. What a number of faults eſcape them during the execution, even let the accompaniſt be ever ſo well experienced! Can we expect, even for the accompaniſt that the ear be formed, that the muſician be able to read with eaſe and rapidity every kind of muſic, that he can, at the inſtant the book is opened, unravel a partition? And ſtill, were this poſſible, we ſhould want a motion of the fingers founded on different principles of accompaniment than thoſe made uſe of until Monſ. Rameau.

Zealous maſters have very clearly ſeen the inſufficiency of their rules. To ſupply the defect, they have had recourſe to the enumeration and deſcription of conſonances, every diſſonance of which is extended, accompanied, and prevented, in all its different caſes. A prodigious detail! which the quantity of diſſonances and of their combinations ſufficiently evince, and with which the memory remains loaded.

Many adviſe the compoſition to be ſtudied before we paſs to the accompaniment, as if the accompaniment was not compoſition itſelf, except in regard to the invention, that more is neceſſary to the compoſer. It is as if it was propoſed to begin to learn to read by making one's ſelf an orator. On the contrary,

how many inſiſt on beginning by the accompaniment to learn compoſition! and this plan is certainly more reaſonable and more natural.

The courſe of the baſs, the rule of the octave, the method of extending and preventing the diſſonances, compoſition itſelf in general, all this concurs to no other purpoſe, than to ſhew the ſucceſſion of one accord to another; ſo that in every accord there are freſh objects, new ſubjects for reflection! What a continual labour! When will the mind be ſufficiently inſtructed, and when the ear ſufficiently exerciſed, ſo that the fingers be no longer ſtopt?

Theſe are the difficulties which Monſ. Rameau has propoſed to remedy by his new cyphers, and by his new rules for accompaniment. I will endeavour to point out, in few words, the principles upon which his methods are founded.

In harmony there are but conſonances and diſſonances. Conſequently there are only conſonant accords and diſſonant.

Each one of theſe accords is fundamentally divided by tierces or thirds (this is Monſ. Rameau's ſyſtem). The concinnous accord is compoſed of three notes, viz. ut, mi, ſol, and the diſſonant of four, viz. ſol, ſi, re, fa, laying aſide the ſuppoſition and ſuſpenſion, which, in the place of thoſe notes, whoſe removal is required, introduce others, as it were, by licence; but the accompaniment bears never more than four. (Vide SUPPOSITION and SUSPENSION.)

Where concinnous accords ſucceed each other, where diſſonant accords are followed by others diſſonant alſo, and where the concinnous and the diſſonant are intermixt.

Whereas the perfect concinnous accord agrees only to the tonic, the ſucceſſion of concinnous accords furniſhes ſo many tonics, and conſequently an equal number of changes of the tone.

The diſſonant accords ſucceed each other commonly in the ſame tone, if the ſounds therein are not greatly varied. Diſſonance unites together the harmonic ſenſe, one accord thereof excites the deſire of another.

If the tone be changed in this ſucceſſion, this change is always denoted by a dieſis, or a B mollare. In regard to the third ſucceſſion, that is to ſay, the intermixture of conſonant and diſſonant accords, Monſ. Rameau reduces it to two caſes only, and he gives it as his opinion in general, that a conſonant accord cannot be immediately preceded by any other diſſonant accord, than that of the ſeventh of the dominant tonic, or that of the ſixte quinte of the ſous dominant, except in the broken cadence and the ſuſpenſions; and farther he advances, that there are no exceptions in regard to the foundation. It appears evident to me, that a perfect accord may yet be preceded by the

accord

accord of the diminiſhed ſeventh, and even by that of the ſuperfluous ſixth, two original accords, the latter of which ſuffers no alteration.

Herein then we ſee three different textures of harmonic phraſes. Firſt, the tonics, which ſucceed each other, and form an equal number of new modulations. Secondly, the diſſonances, which ſucceed each other ordinarily in the ſame tone. Thirdly, and laſtly, the conſonances and diſſonances, which are intermixt, and where the conſonance is, according to Monſ. Rameau, preceded by the ſeventh of the dominant, or by the ſixte quinte of the ſous dominant. What then remains to be done for the facility of the accompaniment, except to point out, to the accompaniſt, which it is of thoſe textures that is predominant in whatever he accompanies. Moreover, this is what Monſ. Rameau would have executed by characters of his invention.

One ſign alone can eaſily denote the tone, the tonic, and its accord. From thence is derived the knowledge of the dieſis's and B mollare's, which muſt enter into the compoſition of accords from one tonic to another.

The fundamental ſucceſſion by thirds, or by fifths, as well in riſing as in deſcending, gives the firſt texture of harmonic phraſes, entirely compoſed of conſonant accords

The fundamental ſucceſſion by fifths, or by thirds, in deſcending, gives the ſecond texture, compoſed of diſſonant accords, that is to ſay, of accords of the ſeventh, and this ſucceſſion gives a deſcending harmony.

The aſcendant harmony is furniſhed by a ſucceſſion of fifths in riſing, or of fourths in deſcending, accompanied by a diſſonance appropriated to this ſucceſſion, which is la ſixte ajoutee, or the ſixth added, and this is the third texture of harmonic phraſes. This laſt had not till this time been diſcovered by any one, not even by Monſ. Rameau, though he diſcovered the principle of it, in that cadence, which he called irregular. Therefore, by the ordinary rules, the harmony which ariſes from a ſucceſſion of diſſonances, always deſcends, although, according to the true principles, and according to reaſon, it ought to have, in its riſe, a progreſſion equally as regular, as in its deſcent.

The fundamental cadences give the fourth texture of harmonic cadences, where the conſonances and diſſonances are interunited.

All theſe textures may be denoted by characters, ſimple, few in number, evident, which can at the ſame time point out, when it is neceſſary, the diſſonance in general, for the nature of it is always determined by the texture itſelf. We muſt begin by exerciſing ourſelves on theſe textures taken ſeparately, then we muſt make them ſucceed each other on every tone, and on every mode ſucceſſively.

With theſe precautions, Monſ. Rameau pretends that we may learn more of accompaniment in ſix months, than could be learned before in ſix years, and he has experience on his ſide (Vide CYPHERS). In regard to the method of accompanying with intelligence, as it depends more from the uſe and taſte, than from any rules which can be given, I ſhall content myſelf to make here ſome few general obſervations, of which no accompaniſt ought to be ignorant.

Firſt, Although in the principles of Monſ. Rameau, it is neceſſary to ſtrike every ſound of each accord, we muſt be very careful always to obſerve this rule literally. There are accords which would be inſupportable with all this confuſion. In the greateſt part of diſſonant accords, particularly in the accords by ſuppoſition, we muſt abſtract ſome ſound for the purpoſe of diminiſhing its duration. This ſound is ſometimes the ſeventh, ſometimes the fifth: now and then, both the one and the other are cut off. We cut off alſo very often the fifth, or the octave of the baſs in the diſſonant accords, to avoid the octaves or fifths that follow, which may create an ill effect, particularly at the extremity of the piece. For the ſame reaſon, when the ſenſible note is in the baſs, it is never placed in the accompaniment, and to ſupply its place, we double the third or the ſixth, on the right hand. We ought alſo to avoid the intervals of the ſixth, and to keep the two fingers joined, for that renders the diſſonance very rough, which we ought to preſerve for ſome occaſions, where the expreſſion requires it. In general, we ought to reflect, in accompanying, that when Monſ. Rameau wiſhes every accord to be filled up, he has a greater attention to the mechaniſm of the fingers, and to his particular ſyſtem of accompaniment, than to the purity of the harmony. Inſtead of that confuſed ſound which is made by a like accompaniment, we ſhould ſeek to render it agreeable and ſonorous, and make it nouriſh and ſtrengthen the baſs, inſtead of concealing and ſtifling it.

If it ſhould be aſked how this abſtraction of ſounds can agree to the diſinition of the accompaniment by a complete harmony, I anſwer, that theſe abſtractions are in reality but hypothetic, and only within the ſyſtem of Monſ. Rameau; that, according to nature, theſe accords, thus mutilated in appearance, are not leſs complete than the others; ſince the ſounds which are ſuppoſed therein being cut off here, would render them diſagreeable, and often inſupportable; that in effect the diſſonant accords are not at all fulfilled in the ſyſtem of Monſ. Partins, as in that of Monſ. Rameau; that conſequently the defective accords in the one are completed in the other; that in fine, a nice taſte in the execution requiring that we abſtract often from the general rule, and the accompaniment not being always the moſt agreeable, the

definition ought to fix the rule, and cuſtom teach when we ought to differ from it.

Secondly, We ought always to proportionate the ſound of the accompaniment to the character of the muſic, and to that of the inſtruments or voices which we are to accompany. Wherefore in a choir, we ſtrike with the right hand the full accords, with the left we redouble the octave or the fifth, ſometimes the whole accords.

We ought to follow the ſame plan in the Italian recitative, for the ſounds of the baſs not being maintained therein, ſhould not make themſelves underſtood, unleſs with their whole harmony, and for the purpoſe of recalling forcibly, and for a long duration of the idea of the modulation. On the contrary, in a ſlow and ſweet air, when there is but a weak voice, or a ſingle inſtrument for the accompaniment, we cut off the ſounds, we ſlacken ſlowly, we touch the ſmall key. In a word, attention ſhould be always paid, leſt the accompaniment, which is formed but to ſuſtain and embelliſh the ſong, ſpoil, and entirely conceal it.

Thirdly, When we ſtrike the ſame ſtrings to prolong the ſound in a long note, or in a ſeſſion, let it be rather at the beginning of the meaſure, or the ſtrong time, than at another moment. We ought not to repeat the ſtroke till we have well examined the meaſure. In the Italian recitative, how long a duration ſoever a note of the baſs may contain, we ſhould never ſtrike it but once, and that forcibly with its whole accord. We reſtrike the accord only when it changes on the ſame note; but when an accompaniment of violin is attendant on the recitative, then we ſhould ſuſtain the baſs and ſlacken its accord.

Fourthly, When we accompany vocal muſic, we ought, by the accompaniment, to ſuſtain the voice, to guide it, give it its tone in all its takings in, and correct it whenever it is out of tune. The accompaniſt always having the cantata before his eyes, and the harmony preſent in his memory, is eſpecially charged to be careful that the voice loſe not itſelf in an error. (Vide ACCOMPANIST.)

Fifthly, We ought not to accompany in the ſame manner the Italian and French muſic. In the latter, we ſhould ſuſtain the ſounds, ſweeten them continually with grace in a gradual riſe, always fill up the harmony as much as poſſible, play the baſs with propriety, in a word, fall in with every thing that the nature of it requires. On the contrary, in accompanying the Italian muſic, we muſt ſimply ſtrike, and withdraw the notes of the baſs, make neither trills nor graces, but preſerve in it that equal and ſimple courſe which appertains to it. The accompaniment ought to be full, bold, and without ſlackening, except the caſe, of which I have treated numero 3, and ſome takings

in

in, or points d'orgue. We may therein, without ſcruple, diminiſh the ſounds, but in that caſe, we muſt carefully chooſe thoſe which are underſtood, for this purpoſe, that they may be founded in harmony, and be applicably adapted to the voice. The Italians hold it as their opinion, that nothing is heard in the accompaniment, or in the baſs, which can abſtract the ear for one moment from the air; and their accompaniments are always directed on this principle, that the pleaſure and attention evaporate in a diviſion of each.

Sixthly, Though the accompaniment of the organ be the ſame with that of the harpſichord, the taſte of it is very different: as the ſounds of the organ are ſuſtained, the courſe of it ought to be more bounded and leſs changeable. We ſhould raiſe the hand entire as little as poſſible, ſlide the fingers from one ſtop to another without removing thoſe, which, in the place where they are fixt, may be neceſſary to the accord wherein we are intereſted. There is nothing ſo diſagreeable as to hear grate on the organ, that kind of dry ſlackening accompaniment, which we are obliged to practice on the harpſichord. In general the organ, *that* inſtrument, ſo ſonorous and majeſtic, has no aſſociation with any other, and makes but an ill effect in the accompaniment, if it is not, at the moſt, to ſtrengthen the ripeano's and the choirs.

Monſ. Rameau, in his Errors in Muſic, has lately eſtabliſhed, or at leaſt advanced, a new principle, for the omiſſion of which, in my Encycopledie, he cenſures me highly, i. e. that the accompaniment is a repreſentation of the ſonorous body. As I examine this principle in another writing, I ſhall diſpenſe mentioning it in this article, which is already too long. My diſputes with Monſ. Rameau are the moſt uſeleſs circumſtances in the world towards the advancement of art, and conſequently towards the plan of this Dictionary.

ACCOMPANIMENT, Is moreover every part of the baſs, or any other inſtrument, which is compoſed under an air, to render a harmony therein. On this method a ſolo of the violin is accompanied by the violincello, or harpſichord, and an accompaniment of the flute, is very well adapted to the voice. The harmony of the accompaniment is an addition to the agreements of the air, by rendering its ſounds more ſure, their effect more ſweet, the modulation more ſenſible, and by conveying to the ear a teſtimony of juſtneſs which gives pleaſure. In the ſame manner, in regard to the voice, there is a ſolid reaſon for its being always accompanied with ſome inſtrument, whether it be in part, or in uniſon, for though numbers that in ſinging the voice modifies itſelf naturally according to the laws of modification, (Vide MODIFICATION) however, experience teaches us, that the moſt juſt and beſt exerciſed voices have a great trouble

in

in maintaining themſelves any long time in the juſtneſs of the tone, when there is nothing to ſuſtain them therein. By ſtrength of ſinging we riſe and fall inſenſibly, and it is very uncommon that we find ourſelves exactly at the concluſion in the ſame tone from whence we ſet off. 'Tis for the purpoſe of preventing theſe variations, that the harmony of an inſtrument is employed. It maintains the voice in the ſame diapaſon, and when it loſes itſelf, we recall it in an inſtant. The baſs is, of all the parts, the moſt neceſſary for the accompaniment, being that which beſt ſuſtains the voice, and gives a greater pleaſure to the ear, becauſe there are none whoſe vibrations are ſo ſtrong, ſo determinant, or which leave a leſs equivocation in the judgment of fundamental harmony.

To ACCOMPANY, Is in general to play the parts of accompaniment, in the execution of a piece of muſic; or more particularly on a ſuitable inſtrument, to ſtrike with each note of the baſs the accords which it ought to bear, and which are called the accompaniment. I have ſufficiently explained, in the precedent articles, in what conſiſts this accompaniment; I will only add, that this word alſo points out to the accompaniſt in a concert, that he is employed only in an acceſſary part; that he ought but to be diligent in giving a greater weight to the parts of others; that the moment he has the leaſt pretenſions for himſelf, he ſpoils the execution, and tires out, at the ſame time, the muſicians, and the audience. The more he thinks to make himſelf admired, the more ridiculous he appears; and as ſoon as, by the ſtrength of his notes, or miſplaced flouriſhes, he fixes on himſelf that attention due to the principal parts, whatever talents or execution he may diſplay, he diſplays at the ſame time, his vanity and ill judgment. To accompany with merit and with applauſe, our only attention ſhould be to ſuſtain and give weight to the eſſential parts; and he executes very ingeniouſly his own, who cauſes its effect to be preſerved, without permitting the part to be remarked.

ACOUSTIC, The doctrine or theory of ſounds. (Vide SOUND) This word is from the invention of Monſ. Sauveur, and is derived from the Greek ακουω, I hear. The acouſtic is properly the theoretic part of muſic; 'tis that which gives, or ought to give, the cauſes for that pleaſure which we receive from harmony and ſinging, which determines the references of the harmonic intervals, and which diſcovers the bearings and niceties of the vibrations in the chords. (Vide CHORD) Harmony acouſtic is alſo ſometimes uſed adjectively, we ſay the acouſtic organ, an acouſtic phœnomenon, &c. &c.

ACT, That part of an opera which is ſeparated from any other in repreſentation by a ſpace called interlude, or entr' acte. (Vide INTERLUDE) The unity of time and place ſhould be

be obſerved with as much caution in the act of an opera, as in an entire tragedy of an ordinary kind, and even more ſo, in certain points; for the poet ought not to give to an act of the opera, a ſuppoſed duration longer than that which it really has, becauſe we cannot ſuppoſe that what is tranſacted before our eyes takes up a greater duration than that which we ſee it demand in effect; but it depends on the muſician to haſten or retard the action to a certain point, to encreaſe the natural reſemblance or his intereſt, a liberty which obliges him to ſtudy well the gradation of theatrical paſſions, the time that is neceſſary for the extenſion of them, *that* wherein the progreſs is at its higheſt pitch, and *that* where it is incumbent on him to ſtop, to prevent the inattention, the langour, and drowſineſs of the ſpectator. Neither is it permitted to change the ſcenery, and tranſport the theatre from one ſpot to another in the middle of an act, even in the *marvellous*, becauſe ſuch a tranſition is an oppoſition to reaſon and nature, and deſtroys the illuſion, which it is the firſt foundation of the theatre to favour in every reſpect. When then the performance is interrupted by ſuch changes, the muſician can neither tell how he ſhould be prepared for them, nor what he ought to do in his orcheſtra during their continuance, unleſs it be to repreſent the ſame chaos that then reigns within the ſcene.

Sometimes the firſt act of an opera has little reference to the principal action, and ſerves but as an introduction. In that caſe, it is called prologue (Vide PROLOGUE). As the prologue makes no part of the piece, it is never reckoned within the number of acts which it contains, which is commonly five in the French opera, but always three in the Italian. (Vide OPERA.)

ACT OF CADENCE, Is a movement in one of the parts, and chiefly in the baſs, which obliges all the other parts to concur in forming a cadence, or in expreſſly avoiding it. (Vide CADENCE.)

ACTOR, A ſinger who plays a part in the repreſentation of an opera. Beſides all thoſe qualities which he ſhould poſſeſs in common with the dramatic player, he ſhould have many particular ones to ſucceed in his art; for this reaſon, it is not ſufficient that he has a fine voice for ſpeaking, unleſs he has an equally good one for ſinging, for there is not ſuch an union between the ſpeaking and the ſinging voice, that the beauty of the one comprehends that of the other. Though we may forgive an actor the default of ſome one quality, which he flattered himſelf to be able to acquire, we cannot forgive him the audacity of deſtining himſelf for the ſtage, when deſtitute of the natural qualities which are therein neceſſary; as for example, the voice in a ſinger. But by this word voice, I underſtand more the extent, juſtneſs, and flexibility, than the ſtrength of the brain. It is

wiſh that the Theatre, whoſe plan is to touch the heart by ſinging, ſhould be forbid to thoſe rough roaring voices which but ſtun the ear; and that, how little voice ſoever an actor may poſſeſs, if it be juſt, ſtriking, eaſy, and ſufficiently dilated, he has every thing neceſſary; for he will very eaſily make himſelf underſtood, if he can gain the attention of his hearers. With a ſuitable voice, the actor ſhould be attentive to improve it by art; and though his voice may not require it, he will himſelf want it to catch, and render with nicety, the muſical parts of his ſpeeches. Nothing is more inſupportable and diſguſting, than to ſee a hero, in the moſt lively tranſports of his paſſion, conſtrained and retarded in his part, ſtraining and imitating a ſchool-boy, who blunders in his taſk, ſhewing, inſtead of the oppoſition between Love and Virtue, *that* of a bad ſinger between the Meaſure and the Orcheſtra; and more dubious on the tone of his voice, than on the ſide which he ought to take. There is neither warmth nor grace without eaſe, and that actor who labours in his part, will afford neither the one or the other.

It is not ſufficient that the actor in an opera be an excellent ſinger, unleſs he is an ingenious mimic; for he ought not only to cauſe what he ſpeaks to be felt, but alſo what he leaves to be ſpoken by the ſymphony. The orcheſtra does not deliver a ſentiment, but what ſhould ariſe from *his* ſoul; his ſteps, his eyes, his geſture, all ſhould inceſſantly agree with the muſic, and even without his appearing to notice it. He ought always to intereſt, even when he is ſilent; and tho' buſied in a difficult part, if he forgets one inſtant the perſonage, to pay attention to the ſinger, he is but a muſician on the ſtage, he is no longer actor. Many a one has excelled in every other particular, who has got himſelf hiſſed for neglecting *this*. There is no actor to whom, in this reſpect, we may not give the celebrated Chaſſé as a model. This excellent mimic, always placing his art above him, and conſtraining himſelf to excell in it, by that means placed himſelf very much above his companions. Inimitable actor and excellent man! He will leave the admiration and regret of his talents to the lovers of his theatre, and an honourable memory of himſelf to every honeſt man.

ACUTE, Is ſo ſaid of a ſound piercing, or elevated through reference to ſome other ſound. (Vide SOUND.)

In this ſenſe, the word Acute, is oppoſed to the word flat. The more the vibrations of the corpo ſonoro are numerous, the more the ſound is acute. The ſounds conſidered under the references of acutes and flats, are the ſubject of harmony. (Vide HARMONY. CONCORD.)

ADAGIO, This word, written at the beginning of an air, denotes the ſecond, from ſlow to quick, of the five principal degrees of

movement, diſtinguiſhed in the Italian muſic. (Vide MOVEMENT.) Adagio is an Italian adverb, which ſignifies a l'Aiſe, or gradually; and it is alſo by this Method, that we ſhould ſtrike the meaſure of thoſe airs to which it is applied. The word Adagio is ſometimes uſed ſubſtantively, and is applied metaphorically to thoſe pieces of muſic whoſe movement it determines. Other words of a like nature are ſimilarly uſed. So we ſay, an Adagio of Partini, an Andante of Martino, and an Allegro of Locarelli, &c.

ADQUISITA, This was in the Greek muſic that chord or ſound which they called Proſlambanomenos. (Vide this Word.)

A ſixte ajoutée, or a ſixth ad quiſita, is a ſixth added to a perfect accord, and whoſe name, an accord thus augmented, ordinarily takes. (Vide CONCORD and SIXTH.)

AFFETUOSO, An adjective taken as an adverb.

This word, written at the beginning of an air, denotes a movement, ſomething between the Andante and the Andagio, and in the character of the air itſelf, an expreſſion affecting and ſweet.

AGOGE, One of the ſub-diviſions of the ancient Melopœia, which gives the rules for the courſe of an air by degrees alternatively, conjoint or diſjoint, whether in ariſing or deſcending, (Vide MELOPOEIA.) Martianus Capella gives, after Ariſtides Quintilian, to the word Agogé another ſenſe, which I ſhall treat of under the word Tirata.

AIR, A piece of muſic which is adapted to the words of a ſong, or of a piece of poetry proper for ſinging; and in an extenſive ſenſe, the ſong itſelf is called Air. In the opera, the name of Air is given to all the meaſured chants, to diſtinguiſh them from the recitative; and in general, every compleate piece of vocal and inſtrumental muſic which forms a Tune, is called Air, whether this compoſition makes of itſelf an entire piece, or that it can be detached from *that* whole, of which it is a part, and executed ſeparately.

If the ſubject or air be divided into two parts, it is called Duo, or Duet; if into three, Trio.

Saumaiſe imagines, that this word comes from the Latin æra; Baretti is of his opinion: tho' Menage oppoſes them in his Etymologies of the French language.

The Romans had *their* ſigns for the rhyme, in the ſame manner as the Greeks had theirs, and theſe ſigns, drawn alſo from their Characters, were not only called numerus, but æra; that is to ſay, number, or the marks of the number, numeri nota, ſays Nominus Marcellus. 'Tis in this ſenſe that the word æra is found uſed in this verſe of Lucilius,

Hæc eſt ratio: Perverſa æra! Summa ſubducta improbé!

And Sextus Rufus uſes it in the ſame manner.

Moreover,

Moreover, though this word was originally taken only for the number or meaſure of the chant, in the end it was made uſe of in the ſame manner as in the word numerus; and æra was uſed to denote the ſong itſelf; from whence is derived, according to the two authors I have cited, the French word Air, and the Italian Aria taken in the ſame ſenſe.

The Greeks had a number of different airs, which they called Nomes: the nomes had each their character and their uſe, and many were appropriated to ſome particular inſtrument, almoſt the ſame thing as what we now call pieces or ſonatas.

Modern muſic has divers kinds of airs, each of which has reference to ſome ſort of dance, whoſe name theſe airs generally bear. (Vide MINUET, &c. &c.) The airs of our operas are (if I may uſe the expreſſion) the canvas or foundation, on which the paintings of imitative muſic are coloured. The melody is the deſign, the harmony the colouring,—all the picturesque objects of nature's beauty, all the reflected ſentiments of the human heart, are the models which are imitated by the artiſt. Attention, intereſt, the charms of the ear, and the emotion of the heart, are the reſult of theſe imitations. (Vide IMITATION) An ingenious and agreeable air, an air compoſed with taſte and diſcovered genius, is the chef d'auvre of muſic. 'Tis *there*, that a fine voice dilates itſelf, that a noble ſymphony ſhines with luſtre; 'tis *there*, that the paſſion inſenſibly ſtrikes the ſoul by the ſenſe. After a fine air we are ſatisfied, the ear deſires nothing more. It reſts in our imagination, we convey it away with us, we repeat it at our pleaſure. Without being able to render a ſingle note, we preſerve it in our minds as we heard it in the performance; we view the ſcene, the actor, the theatre; we hear the accompaniment and the applauſe. A true lover of muſic never loſes the fine airs which he has heard during life, but makes the opera re-commence whenever he chooſes. The words of airs do not always follow in a regular ſuit, neither are they ſpoken as thoſe of the recitative, tho' they are generally ſhort, they divide, they are repeated, and are extended to ſuch a length as it pleaſes the compoſer; they do not form a part of the narration, but paint, either a picture, which muſt be ſeen from different points of ſight, or a ſentiment, in the which the heart is intereſted, and from which it cannot (to uſe the expreſſion) detach itſelf; and the different variations of the air, are but ſo many methods of viewing the ſame image. 'Tis for this reaſon that the ſubject ſhould be one and the ſame; 'tis by theſe well underſtood repetitions, by theſe redoubled ſtrokes, that an expreſſion, that at firſt might eſcape your notice, in fine agitates you, and tranſports you from yourſelf; and it is ſtill through the ſame principle that the ſhakes, which in pathetic airs ſeem ſo miſ-

placed, are not ſo always: the heart, impreſſed with a very lively ſentiment, often expreſſes it more feelingly by inarticulate ſounds than by words.

The form of airs is of two kinds: the leſſer airs are often compoſed of two diviſions, each of which is ſung twice; but the greater airs of the opera are more frequently in Rondeau's. (Vide RONDEAU.)

AL SEGNO, or DA CAPO, Theſe words written at the end of an air, denote, that the firſt part muſt be re-commenced, not entirely at the beginning, but at that place where the return is marked.

ALLA BREVE, An Italian term, which denotes a kind of meaſure of two times very quick, and which however is marked with a ronde or ſemibreve per tempo. It is no longer made uſe of in Italy, and only in church-muſic. It anſwers almoſt to what they call in France the Gros-fa.

ALLA ZOPPA, An Italian term, which makes a conſtrained movement, ſyncopating between two times, without ſyncopating between two meaſures, which gives to the notes an irregular, and, as it were, a lame direction. 'Tis a notice alſo, that this ſame courſe continues to the end of the air.

ALLEGRO, adjective taken adverbly.

This Italian word written at the beginning of an air, denotes, from quick to ſlow, the ſecond of the five principal degrees of movement, diſtinguiſhed in the Italian muſic. Allegro ſignifies lively, and it is alſo the indication of a lively movement, the moſt ſo of any after preſto. But we muſt not think, on that account, that this movement is proper for gay ſubjects only; it is often applicable to tranſports of paſſion, diſtraction or deſpair, which partake of nothing leſs than of gaiety. The diminutive Allegretto denotes a more moderated gaiety, and a little leſs vivacity in the meaſure. (Vide MOVEMENT)

ALLEMANDE, A kind of air or piece of muſic, the meaſure of which is a quatre temps, and is ſtruck with a flat. It appears by its name, that this kind of air firſt came from Germany, tho' they know not the leaſt of it in that country. The Allemande in a ſonata is quite abſolete, and the muſicians very rarely make uſe of it at preſent; thoſe alſo who ſtill employ it, give it a far more lively movement.

ALLEMANDE, Is alſo the air of a dance very common in Switzerland and Germany. This air, as well as the dance, has much gaiety, it is played a deux temps.

ALTUS. (Vide HAUTE CONTRE)

AMBITUS, Is a name which was formerly given to the extent of every tone or mode from flat to ſharp; for tho' the extent of a mode was in ſome reſpects fixed to two octaves, there were irregular modes, the Ambitus of which exceeded this extent, and others imperfect, where it did not reach it.

In

In the plain chant, this word is again uſed, but the Ambitus of perfect modes is only of one octave therein; thoſe that exceed it, are called ſuperfluous modes; thoſe that do not reach it, diminiſhed modes. (Vide MODES)

AMOROSO. (Vide TENDERLY)

ANACAMPTOS, A term of the Greek Muſic, which ſignifies a collection of retrograde notes, or of notes proceeding from the ſharp to the flat. 'Tis the contrary to Euthia. One of the parts of the ancient melopœia had alſo the name of Anacamptoſa. (Vide MELOPOEIA)

ANDANTE, This word written at the beginning of an air, denotes, from ſlow to quick, the third of the five principal degrees of movement, diſtinguiſhed in the Italian muſic. Andante is the participle of the Italian verb, Andare, to go. It denotes a movement marked, without being gay, and anſwers very nearly to that which is deſcribed by the word Gracieuſement. (Vide MOVEMENT)

The diminutive Andantino denotes a little leſs gaiety in the meaſure, which muſt be particularly obſerved, as the word Larghetto ſignifies exactly the contrary. (Vide LARGO)

ANTIPHONA, Is a kind of chant made uſe of in the catholic church.

The Antiphonæ were ſo named, becauſe in their origin they were ſung with two choruſſes, which anſwered each other alternately; and the pſalms and hymns ſung in the church were comprehended under this name. Ignatius, diſciple of the apoſtles, was, according to Socrates, the inventor of this method of ſinging amongſt the Greeks; and Ambroſius introduced it into the latin church: Theodore attributes the Invention to Diodorus and Flavian.

At preſent, the ſignification of this term is confined to certain ſhort paſſages drawn from ſcripture, which are applicable to the feaſt which is celebrating, and which preceding the pſalms and cantics, direct their intonation: the name of Antiphona is alſo preſerved in ſome hymns ſung in honour of the Virgin, ſuch as Regina Cœli, Salve Regina.

ANTIPHONY, A name which the Greeks gave to that kind of ſymphony, which was performed by divers voices, or by different inſtruments to the octave or double octave, in oppoſition to that which was executed in ſingle uniſon, and which they called Homophony. (Vide SYMPHONY)

This word is derived from Ἀντὶ contra and φωνὴ vox, as if one were to ſay an oppoſition of the voice.

ANTIPHONARY, A book which contains in notes the Antiphony and other chants, which are uſed in the catholic church.

APOTHETUS, A kind of name applicable to the flutes in the ancient muſic of the Greeks.

APOTOME,

APO TOME, That which remains of a tone major, after that a limma has been abſtracted, which is an interval, leſs by a comma, than the ſemitone major, conſequently the Apotome is greater by a comma than the middle ſemitone. (Vide COMMA, SEMITONE.) The Greeks, who knew perfectly well that the tone major cannot, by reaſonable diviſions, be divided into two equal parts, divided it unequally by many methods. (Vide INTERVAL)

From one of theſe diviſions, invented by Pythagoras, or rather by Philolaus, his ſcholar, reſulted the dieſis or limma on one ſide, and the Apotome on the other, the ſtandard of which is from 2048 to 2187. The derivation of this Apotome is found at the Septieme Quinte, ut Dieſis, beginning by ut Natural, for the quantity by which this ut Dieſis ſurpaſſes the ut Natural drawn neareſt, is preciſely the reference which I have juſt obſerved.

The ancients gave alſo the ſame name to other intervals. They called Apotome major a little Interval, which Monſ. Rameau calls the inharmonic Quart de ton, the which is formed of two ſounds in the ſtandard of 125 to 128.

And they called minor Apotome, the interval of two ſounds, whoſe diſtinction was from 2025 to 2048, an interval ſtill leſs ſenſible to the ear than the preceding.

Jean de Muris and his contemporaries give the name of Apotome chiefly to the minor ſemitone, and that of dieſis to the ſemitone major.

APYCNI, plural, The ancients called by this name in their ſcale, three of eight ſolid ſounds of their ſyſtem or diagramma, the which touched not on any ſide the compact intervals, that is, to the proſlambanomenos, the note ſynnemenon, and the note hyperboleon.

They called alſo Apycnos, or not crouded, the diatonic genus, becauſe in the tetrachords of that genus the ſum of the two firſt intervals was greater than the third. (Vide CROUDED, GENUS, SOUND, TETRACHORD)

ARBITRIO. (Vide CADENZA)

ARCO, A Bow, Theſe Italian Words Con l'Arco, denote, that after having ſlipped off the chords, we muſt replace the bow to the part where they are written.

ARIETTA, This diminutive, derived from the Italian, ſignifies properly a little air; but the ſenſe of this word is altered in France, and the name of Arietta's is given to greater pieces of muſic, of a movement generally rather gay, which are ſung with accompaniments and ſymphony, and which are commonly in rondeau. (Vide AIR, RONDEAU)

ARIOSO, This Italian word at the beginning of an air, denotes a kind of ſinging well ſuſtained, open, and appropriated to the greater airs.

ARISTOXENIANS

ARISTOXENIANS, A ſect that had for their chief Ariſtoxenes, of Tarentum, Scholar of Ariſtotle, and which was repugnant to the Pythagoreans, in regard to the meaſure of intervals, and on the method of determining the references of the ſounds; ſo that the Ariſtoxenians made application ſolely to the judgment of the ear, and the Pythagoreans to the preciſion of calculations. (Vide PYTHAGOREANS)

ARPEGGIO, The method of cauſing the different ſounds of an accord to be heard ſucceſſively and rapidly, inſtead of ſtriking them all at a time. There are inſtruments on which there cannot be formed a full accord but thro' the Arpeggio. Such are the violin, the violincello, the viol, and all thoſe which are played with the bow; for the convexity of the bridge hinders the bow from fixing itſelf at once on all the ſtrings. For the formation then of accords on theſe inſtruments, we are obliged to uſe the Arpeggio, and as we cannot draw more ſounds than there are ſtrings, the Arpeggio of the violincello, or of the violin, cannot be compoſed of more than four ſounds. In the Arpeggio each of the fingers muſt be arranged on its chord, and the Arpeggio muſt be drawn from a ſingle and forcible ſtroke of the bow or fiddle-ſtick, which muſt begin ſtrongly on the largeſt ſtring, and conclude by turning and ſoftening on the leſſer gradually. If the fingers were only arranged ſucceſſively on the ſtrings, or that many ſtrokes of the fiddle-ſtick were given, it would no longer be Arpeggio, but only a very quick paſſage on ſeveral notes in continuance.

What is done on the violin thro' neceſſity, is practiſed by taſte on the harpſichord. As we can only draw from that inſtrument ſounds of a ſhort continuance, we are obliged to re-ſtrike them in notes of a long duration. To make an accord of a longer duration, we ſtrike by the Arpeggio, beginning with the lower ſounds, and remarking, that the fingers which have firſt ſtruck quit not their ſtroke until all the Arpeggio be finiſhed, for the purpoſe of hearing at once every ſound of the accord. (Vide ACCOMPANIMENT)

Arpeggio is an Italian word, which is Frenchified into that of Arpege. It is derived from the word Arpa, becauſe 'tis from the playing of the harp that we have taken the idea of the Arpeggio.

ARSIS and THESIS, Terms of muſic and proſody.—Theſe two words are Greek. Arſis comes from the verb ἄιρω tollo, I raiſe, and denotes the elevation of the voice or of the hand: the falling which follows this elevation, is what is called θέσις depoſitio. Remiſſio.

In regard then to the meaſure, per arſin, ſignifies in raiſing, or continuing the higheſt time; per theſin, in lowering, or continuing

tinuing the loweſt time: in which caſe we ought to take notice, that our method of marking the meaſure is very different from that of the ancients, for we ſtrike the higheſt time and elevate the loweſt. To remove every equivocal term, we may ſay, that Arſis ſignifies the bold and ſtrong time; and Theſis, the fainter and weak. (Vide MEASURE, TIME, to BEAT TIME.)

In regard to the voice, we ſay that a chant, a counterpoint, a fugue, are per theſin, when the notes riſe from flat to ſharp; per arſin when they deſcend from ſharp to flat. Fugue per arſin and theſin, is what is now called counter fugue, in the which the anſwer is made in a contrary ſenſe, that is to ſay, in deſcending if the guida has riſen, and in riſing if the guida has deſcended. (Vide FUGUE.)

ASSAI, An augmentative adverb, which is often found joined to the word which denotes the movement of an air: wherefore preſto aſſai, largo aſſai, ſignify very quick, very ſlow. The Abbé Braſſard has made out of this word one of his ordinary double ſenſes, by ſubſtituting, inſtead of its true and only meaning, that of an ingenious mediocrity of ſlowneſs and quickneſs. He believed, that Aſſai ſignified aſſez, i. e. enough: for which reaſon we ought to admire the ſingular fancy that this author had of preferring in his vocabulary, to his mother-tongue, a foreign language which he underſtood nothing of.

AUBADE, A nightly concert in the open air, under the windows of a houſe. (Vide SERENADE.)

AUTHENTIC, When the octave is found harmonically divided, as in this proportion, 6, 4, 3, that is to ſay, when the fifth is in the flat, and the fourth in ſharp, the mode or tone is called Authentic, except in regard to the tone plagal, where the octave is arithmetically divided, as in this proportion, 4, 3, 2, which fixes the fourth in flat, and the fifth in ſharp.

To this explanation, adopted by all the authors, but which is to no purpoſe, I will add the following: the reader may take his choice. When the finale of a chant is alſo its tonic, and the chant does not deſcend ſo far as to the Dominant au deſſous, the tone is called authentic; but if the chant deſcends or concludes at the dominant, the tone is plagal. I here take the words tonic and dominant in their muſical acceptation. Theſe differences of authentic and plagal are obſerved but in the plain chant, whether the finale be placed at the bottom of the diapaſon, which makes the tone authentic, or whether we place it in the middle, which makes it plagal, provided that on the whole, the modulation be regular. Modern muſic admits all the chants as equally authentic, in whatever place of the diapaſon the finale may chance to fall. (Vide MODE.) There

are

are in the eight tones of the Roman church four *authentic*, to wit, the firſt, the third, the fifth, and the ſeventh. (Vide TONES of the CHURCH) Formerly, the name of *authentic fugue* was given to that whoſe ſubject proceeded in a gradual riſe, but that Denomination is no longer in uſe.

---

# B.

B FA SI, or B FA B MI, or ſimply B, The name of the ſeventh ſound of the gamut of Aretin, for the which the Italians and other Europeans repeat the B, ſaying B MI, when it is natural; B FA, when it is a B Flat; but the French call it SI. (Vide SI.)

B FLAT, Character of muſic, to which is given nearly the figure of a ♭, and which leſſens the note to which it is join'd by a ſemitone minor. (Vide SEMITONE.)

Guy d'Arezzo, having formerly given names to ſix of the ſounds of the octave, from the which he compoſed his celebrated Hexacord, left the ſeventh without any other name than that of the letter B, which is proper to it, as the C to ut, and the D to re, &c. Moreover this B was ſung in two methods, that is to ſay, in a tone below la, according to the natural order of the gamut, or only in a ſemitone of the ſame la, when they wiſhed to unite the tetrachords, for at that time they knew nothing of our modes or modern tones. In the firſt caſe, the ſi ſounding very roughly, on account of the three conſecutive tones, it was judged that it cauſed to the ear an effect ſimilar to that which angulated and hard bodies cauſe to the hand, for which reaſon it was called B hard, or B ſharp, in Italian B quadro. In the ſecond caſe, on the contrary, it was found that the ſi was extremely ſoft, therefore they called it B flat. By the ſame analogy it might have alſo been called B round, and effectually the Italians called it often B rondo.

There are two methods of making uſe of the B flat, the one accidental, when in the courſe of an air it is placed on the left of a note. This note is almoſt always the ſenſible note in the major tones, and ſometimes the ſixth in the minor tones, when the cleff is not correctly numbered. The accidental B flat changes only the note which it touches, and thoſe which immediately anſwer to it, or at the moſt, thoſe, which, in the ſame bar or meaſure, are found on the ſame degree, without any contrary ſign.

The other method is to employ the B flat in the cleff, and in that caſe it modifies it, it acts in the whole courſe of the air, and upon all the notes placed upon the ſame degree, unleſs this B flat be accidentally deſtroyed by ſome dieſis or B ſharp, or that the cleff undergoes ſome change.

The poſition of the B flat on the cleff is by no means arbitrary; herein lies the reaſon: it is intended to change the place of the ſemitones of the ſcale; moreover, thoſe two ſemitones ought always to preſerve between them preſcribed intervals, i. e, that of a fourth on one ſide, and of a fifth on the other. Wherefore the note mi, inferior to its ſemitone, makes in the flat the fifth of ſi, which is its homologue in the other ſemitone; and in the ſharp, the fourth of the ſame ſi, and the note ſi, reciprocally make in the flat the fourth of mi, and in the ſharp, the fifth of the ſame mi. If then, as in example, leaving out the natural ſi, a B flat was given to mi, the ſemitone would change its place, and be found a degree lower, between the re and the mi B flat. Moreover, in this poſition, we ſee that the two ſemitones would no longer preſerve the preſcribed diſtance between each other; for the re, which would be the inferior note of the one, would make in the flat the ſixth of ſi, its homologue in the other, and in the ſharp, the third of the ſame ſi; and this ſi would make in the flat the third of re, and in the ſharp, the ſixth of the ſame re. Wherefore the two ſemitones would be placed too near on the one ſide, and too great a diſtance on the other.

The order of B's flat ought not then to begin by mi, nor by any other note of the octave but ſi, the only one which has not the ſame inconvenience; for as much as the ſemitone changes its place therein, and ceaſing to be between the ſi and the ut, deſcends between the ſi B flat, and the la, ſtill the preſcribed order is not demoliſhed. The la, in this new arrangement, being found on one ſide at the fourth, and on the other at the fifth of mi, its homologue, and *that* reciprocally.

The ſame reaſon which fixes the firſt B flat on the ſi, fixes the ſecond on the mi, and ſo in continuance, in aſcending a fourth, or deſcending a fifth as far as ſol, at which is commonly made a ſtop, becauſe the B flat of ut, which will be found hereafter, differs not from the ſi in practice. That cauſes then a collection of five B flat's in this order.

1. 2. 3. 4. 5.
Si. Mi. La. Re. Sol.

By the ſame reaſon alſo, we cannot uſe the latter B's flat in the cleff, without uſing alſo thoſe which precede them; wherefore the B flat of mi, is never placed but with that of ſi, and that of la, but with the two preceding, and each of the following, but with all thoſe which precede it.

In

In the article cleff may be found a *Formula*, to know immediately if a tone or a mode given, ought to bear B's flat within the cleff, and how many.

B SHARP, A character of muſic which is written thus, ♯; and which, being placed on the left of the note, denotes that *that* note, having been precedently elevated by a dieſis, or lowered by a B flat, ought to be replaced in its natural and diatonic elevation.

The B ſharp was invented by Guy d'Arezzo. This author, who gave names to the ſix firſt notes of the octave, left none but the letter B to expreſs the natural ſi: For every note had, at that time, its correſpondent letter; and as the diatonic chant of this ſi is rough, when we aſcend to it from the fa, he called it ſimply B dur, or hard, B quarré, by an alluſion which I have mentioned in the preceding article.

The B ſharp ſerved in the end to deſtroy the effect of the anterior B flat, on the note which followed the B ſharp, that is, that the B flat being generally placed on the ſi, the B ſharp which followed directly after, by deſtroying this B flat, produced only its natural effect, which was to repreſent the note ſi without alteration. In the end, it was uſed for extenſion, and in default of another ſign, to deſtroy alſo the effect of the dieſis; and 'tis in this manner that it is employed till this time. The B ſharp effaces equally the B flat, or the dieſis, which have preceded it.

There is, however, a diſtinction to be made. If the dieſis or the B flat were accidental, they are deſtroyed without return by the B ſharp, in all the notes which follow it mediately or immediately on the ſame degree, until there preſents itſelf a new B flat or a new dieſis. But if the B flat or the dieſis are on the cleff, the B ſharp effaces them only for the note which it immediately precedes, or at the moſt, for all thoſe which follow in the ſame meaſure and on the ſame degree; and in every note changed at the cleff, whoſe alteration we wiſh to deſtroy, ſo many new B ſharp's are neceſſary. All this is very poorly underſtood, but ſuch is the cuſtom.

Some have given another ſenſe to B ſharp, and granting it only the right of effacing the accidental dieſis's or B flat's, deny it that of changing any thing in the ſtate of the cleff; ſo that, in this ſenſe, on a fa dieſis'd, or a ſi marked with B flat on the cleff, the B ſharp would ſerve but to deſtroy an accidental dieſis on this ſi, or a B flat on this fa, and would always ſignify the fa dieſis, or the ſi B flat, juſt as it is on the cleff.

Others alſo made uſe of the B ſharp to efface the B flat, and even that of the cleff, but never to efface the dieſis. 'Tis the B flat only which they employ in this laſt caſe.

The firſt cuſtom has entirely prevailed; the latter become more uncommon, and are aboliſhed day by day; but it is neceſſary to give attention to it in the reading of ancient muſic, without which we ſhould often be deceived.

BALLET, A theatrical action which is repreſented by the dance directed by the muſic: This word is derived from the old French Baller, to dance, to ſing, to amuſe one's ſelf. The muſic of a ballet ought to have ſtill more cadence and accent than that of the vocal, becauſe it is changed to expreſs a greater number of things; and 'tis in it alone to inſpire the dancer with the warmth and expreſſion that the ſinger may receive from the words; and what is ſtill more, it muſt ſupply, in the language of the ſoul and of the paſſions, every thing that the dance cannot expreſs to the eyes of the ſpectators.

Ballet is alſo the name that is given in France to a confuſed kind of opera, wherein the dance is not in the leaſt better regulated than in the reſt, and cauſes no better effect. In the greateſt part of theſe operas, the acts form ſo many different ſubjects, united together only by ſome general ſyſtems, foreign to the action, and which the ſpectator could never perceive, had not the author given him a hint in the prologue. Theſe ballets contain other ballets, which are generally called Fêtes. They are a collection of dances which ſucceed each other without plot, without an union in themſelves, or with the principal action, and where the beſt dancers inform you of nothing but that they dance well. This conduct, ſo little theatrical, ſuffices for a ball, where every actor ſatisfies his deſire, provided that he amuſes himſelf, and where the intereſt which the ſpectator takes in the perſonages, diſpenſes with an attention to things; but ſuch a deficiency in ſubjects and union, ſhould never be ſuffered on the ſtage, not even in the repreſentation of a ball, where the whole ought to be united together by ſome ſecret action, which awakens the attention, and intereſts the ſpectator. This plan in compoſition is not without example, even in the French opera; and there may be ſeen a very agreeable proof of it in the Fêtes Venetiennes.

In general every dance that deſcribes itſelf alone, and every ballet, which is only a ball, ſhould be baniſhed entirely from the lyric theatre. In ſhort, the action of the ſcene is always the repreſentation of another action, and what we ſee therein, is but the image of what ſtrikes our ideas; ſo that it ought not to be this, or that dancer, who preſents himſelf before you, but the character itſelf which he repreſents. Therefore, altho' a private dance repreſents nothing more than itſelf, *that* of the theatre ſhould neceſſarily be the imitation of ſomething elſe, as well as the actor, who, in his character, repreſents a perſon in diſcourſe, and

and the ſcenes which exhibit a different place from that wherein they ſtand.

The worſt kind of ballets, is that which treats of allegorical ſubjects, and wherein, in conſequence, there is but imitation on imitation. The whole art of theſe ſorts of dramas conſiſts, in repreſenting under ſenſible images, a reference purely intellectual, and in making the ſpectator reflect on things quite different from thoſe he ſees, as if, inſtead of drawing his attention to the ſcence, it were a merit to divert it from its objects. Theſe kinds of ballets, beſides, demand ſo great an ingenuity in the dialogue, that the muſician rambles, as it were, in an unknown country, between the points, the alluſions, and epigrams, whilſt the ſpectator does not forget himſelf for an inſtant. According to ſuch a proceeding, there will never be any thing but the ſentiment which can introduce this on the ſtage, and identify it with the actors; every thing that is only intellectual bears it away to the piece, and reſtores it to itſelf. As a proof, we ſee that thoſe perſons, who wiſh to place the moſt wit in the theatre, are the very men that leaſt regard the illuſion. What then can the muſician do in thoſe dramas which pay no reſpect or value to his art? If muſic expreſſes but ſentiments or images, how can it render ideas purely metaphyſic, ſuch as allegories, where the mind is inceſſantly employed with the reference which the objects which are preſented to it, bear to thoſe which it muſt recollect in itſelf?

Would the compoſers but reflect on the true principles of their art, they would uſe greater caution in the dramas which they receive, as well as more truth in the expreſſion of their ſubjects; and when the words of an opera will but give ſome ideas, the muſic will ſoon be taught to ſpeak.

BARCAROLLES, A kind of ſongs in the Venetian language which are ſung by the Gondoliers in Venice. Though the airs of theſe Barcarolles are chiefly formed for the people, and often compoſed by the Gondoliers themſelves; they have ſo great a melody, and ſo pleaſing an accent, that there is no muſician in Italy but piques himſelf on knowing and ſinging them. The liberty that the Gondoliers have of viſiting all the theatres gratis, gives them an opportunity of forming the ear and taſte without any Expence, ſo that they compoſe and ſing their airs, as perſons, who, though converſant in the niceties of muſic, will not vary the ſimple and natural diſpoſition of their Barcarolles. The words of theſe ſongs are generally more than natural, like the converſation of thoſe who ſing them; but thoſe who are delighted with the faithful picture of a people's manners, and who, beſides, love the Venetian dialect, are eaſily led into a fondneſs for them, ſeduced by the beauty of the airs, ſo that many curioſos have very large collections of their pieces.

We

We cannot in conſcience omit remarking, to the glory of Taſſo, that the greateſt part of the Gondoliers can recite by heart, the chief part of his Jeruſalem Delivered; that many know it entirely, and ſpend the nights in their boats, ſinging it alternatively from one veſſel to another, that it is aſſuredly a moſt inimitable Barcarolle. Homer alone had the honour before himſelf of being thus celebrated, and no other epic poem has ſince met with any ſimilar renown.

BARDS, A kind of men, very ſingular, and to this time much reſpected among the Gauls, which were at the ſame time prophets, poets, and muſicians. Bochard derives the word from Parat, to ſing; and Camden agrees with Feſtus, that Bard ſignifies a ſinger, in the Celtic language, BARD.

BARIPYCNI, The ancients called by this term, five of the eight ſounds, or ſtable chords of their ſyſtem, or diagram, that is to ſay, the Hypaté-Hypaton, the Hypaté-Meſon, the Meſe, the parameſe, and the Neté, Diazeugmenon. (Vide PYCNI. TETRACHORD.)

BARITONO, A kind of note between tenor and baſs. (Vide CONCORDANT.)

BAROQUE, A Baroque, or rough muſic, is that, whoſe harmony is confuſed, filled with modulations and diſſonances, its notes hard and unnatural, the intonation difficult, and the movement conſtrained.

It appears evidently that this term muſt be derived from the Baroco of the logicians.

BARRE, C Barré, A kind of meaſure. (Vide C.)

BARS, Lines drawn perpendicularly at the end of each meaſure, on the five lines of the ſcale, to ſeparate the meaſure which finiſhes from that which begins. For which reaſon, thoſe notes contained between two bars, always form a complete meaſure, equal in quantity and duration to each of the other meaſures compriſed between two other bars, provided the movement does not change; but as there are many ſorts of meaſures which greatly differ in their duration, the ſame differences are perceived in the quantities contained between two bars of each of theſe kinds of meaſures. So in the great triple which is marked by this ſign $\frac{2}{3}$ — and which is ſtruck deliberately, the ſum of the notes compriſed between two bars ought to make a circular note and a half, and in the ſinall triple $\frac{3}{8}$ — which is ſtruck quick, the two Bars incloſe only three crotchets, or their quantity; ſo that eight times the quantity contained between the two bars of

of this laſt meaſure, compoſes only once the quantity contained between two bars of the other.

The chief ſervice of bars is to diſtinguiſh the meaſures, and to expreſs their time, which is always fixed on that note which immediately follows the bar. They are alſo uſed in partitions to denote the correſpondent meaſures within each diviſion. (Vide PARTITION.)

Some hundred years ago, a plan was laid down for drawing bars from meaſure to meaſure: The muſic before-hand was ſimple. There was nothing ſeen therein but rounds, minums, and black notes, few crotchets, and hardly ever double crotchets. As the diviſions were more equal, the meaſure was more eaſy to be followed. However, I have ſeen ſome of our beſt muſicians embarraſſed to execute the ancient muſic of Orlando and Claudin. They were loſt in the meaſures, thro' an omiſſion of thoſe bars, to which they had been accuſtomed, and followed, with difficulty, ſuch parts as had been formerly ſung with rapidity by the muſicians of Henry III. and Charles IX.

BASS, That of the four parts of muſic which is below the reſt, the loweſt of all, whence is derived its appellation of baſs. (Vide PARTITION.)

The baſs is the moſt neceſſary of all the parts, 'tis on that the whole of harmony is eſtabliſhed; and 'tis a general maxim among muſicians, that when the baſs is good, the harmony is rarely contrary.

There are a great number of different kinds of the baſs, viz. The *Fundamental Baſs*, which we ſhall treat of in the following article.

The *Continued, or Thorough Baſs*, ſo called becauſe it laſts throughout the whole piece: its chief uſe, omitting that of directing the harmony, is to ſuſtain the voice, and preſerve the tone. It is believed, that it was one Lodovico Viana, one of whoſe treatiſes is extant, who, about the beginning of the laſt century, firſt brought it into uſe.

The *Figured Baſs*, which in lieu of a ſingle note, divides its quantity in ſeveral other notes under the ſame concord. (Vide FIGURED HARMONY.)

The *Conſtrained Baſs*, whoſe air or ſubject, bounded to a ſmall number of meaſures, as four or eight, begins afreſh inceſſantly, whilſt the ſuperior parts purſue their air and harmony, and vary them by different methods. This baſs belongs originally to the couplets of the chacon, a kind of tune, but at preſent it is no longer uſed. The conſtrained baſs deſcending diatonically, or chromatically, and with ſlowneſs from the tonic, or from the dominant, is admirable for pathetic pieces. Thoſe frequent and periodical returns touch inſenſibly the ſoul, and inſpire it with a diſpoſition of languor and melancholy. Examples may be ſeen in

in ſeveral ſcenes of the French opera. But tho' theſe kinds of the baſs have a good effect to the ear, it is ſeldom the ſame in regard to the airs that they are adapted to, which generally conſtitute only a ſimple accompaniment. Beſide the rough and ill conducted modulations, which can be ſcarcely avoided, theſe airs varied in a thouſand methods, and ſtill monotonic, produce a confuſion by no means harmonious; and as they have but little muſic in themſelves, the parts above are greatly detained thro' the conſtraint of the baſs.

The *Singing Baſs*, is that kind of voice which ſings the part of the baſs. There are the baſs recitative, and the baſs in chorus; concordants, or baſs tenor, which have their place between the tenor and the baſs; baſs's diſtinguiſhed properly by that name alone, to which cuſtom has given the name of baſs tenor; and laſtly, counter baſs, the moſt ſo of all the notes which ſing the baſs below the baſs itſelf, and which we muſt not confound with a kind of inſtrument that bears a ſimilar name.

FUNDAMENTAL BASS, Is that which is formed only from the fundamental ſounds of harmony, ſo that below every concord it gives the true fundamental ſound of that concord, i. e. the ſound from whence it is derived by the laws of harmony. Wherein we ſee that the fundamental baſs can have no other texture than that of a regular and fundamental ſucceſſion; without which, the order of the ſuperior parts would be diſcordant. To underſtand this well, it muſt be premiſed, that according to the ſyſtem of Monſ. Rameau, which I have conformed to in this work, every concord, tho' formed of ſeveral ſounds, has but one fundamental to it, that is to ſay, that which has produced this concord, and which ſerves as a baſs to it, in direct and natural order. Moreover, the baſs which reigns under all the other parts, does not always expreſs the fundamental ſounds of the concords; for amongſt all the ſounds that form a concord, the compoſer may appropriate to the baſs whichever he thinks preferable, with a view to the order of this baſs, to the beauty of his air, and above all, to the expreſſion, as I ſhall explain it in the future pages. In this caſe, the true fundamental ſound, inſtead of being in its natural place, which is the baſs, is tranſported into the other parts, or perhaps is not expreſſed at all; and *ſuch* a concord is ſtiled a ſubverted concord. In its foundation, a ſubverted concord differs not from the direct accord which has produced it, for they are ſtill the ſame ſounds, but theſe ſounds forming a different combination, all thoſe combinations have been long taken for ſo many different fundamental concords, and they have received different names, which may be ſeen under the word Concord; and which have continued to diſtinguiſh them, as if the difference of names could produce any variation in their nature.

Monſ.

Monſ. Rameau has ſhewn in his Treatiſe of Harmony, and M. d'Alembert, in his Elements of Muſic, has given a ſtill clearer evidence, that many of theſe pretended concords were only the ſubverſions of a ſingle one. So, the concord of the ſixth is only a perfect concord, whoſe third is tranſported to the baſs; in conveying to it the fifth, we ſhall have the concord of the ſixth fourth. Herein then we ſee three combinations of a concord which has but three ſounds; thoſe which have four are capable of four combinations, as every ſound may be conveyed to the baſs. But by introducing, under this, another baſs, which under all the combinations of the ſame concord, prevents us always a fundamental ſound; it is evident, that the number of conſonant concords is reduced to a third, and the number of diſſonant to a fourth. Add to that, all the concords by ſuppoſition which are ſtill reduced to the ſame fundamentals, and you will find the harmony ſimplified to a degree that one could not have expected, conſidering the confuſed ſtate in which its rules were founded before the time of M. Rameau. It is certainly, as that author obſerves, an aſtoniſhing thing that it has been poſſible the practice of that art to be carried to the height to which it has arrived without knowing its foundation, and that we have found exactly every rule, without being able to diſcover the principles from whence it is derived.

After having ſhewn what is the fundamental baſs under the accords, let us now ſpeak of its direction, and of the method by which it unites the concords together. The precepts of art on this head, may be reduced to the ſix following rules.

I. The fundamental baſs ſhould never ſound any other notes than thoſe of the Gamut of that tone, in which we are employed, or of that thro' which we intend to paſs. This is the firſt and moſt indiſpenſible of all its rules.

II. In the ſecond place, its courſe ſhould be ſo ſubmitted to the laws of modulation, that it ſhould never ſuffer the idea of a note to be loſt, but in taking up that of another, that is to ſay, the fundamental baſs ſhould never wander, or ſuffer the tone which is before us, to be forgot an inſtant.

III. In the third place, it is ſubjected to the union of concords, and to the preparation of diſſonances, a preparation which, as I will ſhew, is only one of the caſes of union, and which, conſequently, is never neceſſary when the union can exiſt without it. (Vide UNION, to PREPARE.)

IV. By the fourth rule it ought, after every diſſonance, to follow the progreſs, which is preſcribed to it thro' the neceſſity of preſerving it.

V. By the fifth, which is only a ſummary of the precedent, the fundamental baſs ought only to move in conſonant intervals; as it is only in a caſe of broken cadence, or after a concord of

the diminiſhed ſeventh, that it aſcends diatonically. Every other movement of the fundamental baſs is erroneous.

VI. Finally, by the ſixth, the fundamental baſs or harmony, ſhould undergo no ſyncope, but ſhould denote the meaſure and time by a well cadenced change of concords; for the purpoſe that the diſſonances, which ought to be prepared, ſhould be ſo on a weak time, but particularly that all the ſtops ſhould be found on a ſtrong time. This ſixth rule meets with a great number of exceptions, but the compoſer ſhould ſtill be attentive to it if he wiſhes to form a piece, wherein the movement may be well pointed, and whoſe meaſure may fall with grace.

Wherever theſe rules are obſerved, the harmony will be regular, and without error, which will not however prevent the muſic from being diſpleaſing. (Vide COMPOSITION.)

One word of diſcuſſion on the fifth rule will not be by any means uſeleſs. Let the fundamental baſs be ſhifted as we pleaſe, if it be well formed, we ſhall find therein but theſe two things, either perfect concords or conſonant movements, without which theſe concords could have no union, or diſſonant accords in the acts of cadence; in every other caſe, the diſſonance can neither be well placed, or well preſerved.

Thence it follows, that the fundamental baſs can have no regular courſe, but by one of theſe three methods. 1ſt. To aſcend or deſcend from a third or ſixth. 2dly. From a fourth or fifth. 3dly. To aſcend diatonically to the method of the diſſonance, which forms the union, or by courſery, on a perfect concord. In regard to the diatonic deſcent, it is a plan entirely aboliſhed in the fundamental baſs, or at the moſt tolerated in caſe of two conſecutive perfect concords, ſeparated by a ſtop expreſt or underſtood therein. This rule has no other exception; and 'tis thro' not having diſcovered the true foundation of certain paſſages, that M. Rameau has made the fundamental baſs deſcend diatonically on the concords of the ſeventh, which cannot be ſuffered in a complete harmony. (Vide CADENCE, DISSONANCE.)

The fundamental baſs, which is added only as a proof of harmony, is cut off in the execution, and often it would form a very ill effect; for it is according to M. Rameau, for the judgment and not the ear:—It would at leaſt produce a very diſguſting monotony by the frequent returns of the ſame concord, which is diſguiſed and varied more agreeably in a combination, by different methods on the thorough baſs, without reckoning that the different revolutions of harmony furniſh a thouſand methods of adding freſh beauties to the air, and a new energy to the expreſſion. (Vide CONCORD.)

If the fundamental baſs does not ſerve for the compoſition of good muſic, if even it ought to be retrenched in the execution,

I ſhall be aſked in what particular it is of ſervice? I anſwer, that in the firſt place it ſerves as a rule for ſcholars to learn the methods of forming a regular harmony, and giving to every part the diatonic and elementary courſe which is preſcribed to them by this fundamental baſs. It ſerves, ſecondly, as I have already ſaid, to diſcover if an harmony already compoſed be good and regular; for every harmony which cannot be ſubmitted to a fundamental baſs, is regularly incorrect. It is of uſe laſtly, to find a thorough baſs under a given air; although, in fact, he who is not able to compoſe directly a thorough baſs, will not be ſuperior in the compoſition of a fundamental; and much leſs will he know the art of transforming this fundamental baſs into a good thorough baſs. Herein then lie the principal rules that M. Rameau lays down for the diſcovering the fundamental baſs in a given air.

I. To be certain of the tone or mode by which the air is begun, and of all thoſe thro' which we paſs. There are alſo rules for this diſcovery of the tone, but ſo long, ſo vague, and incomplete, that the ear is formed a long time before the rules are learned; and the fool, who would endeavour to make uſe of them, will only gain the habit of proceding note by note, without ever knowing where he is.

II. To try ſucceſſively on each note the principal chords of the tone, beginning by the moſt analogous, and continuing to the moſt diſtant, if we lie under that neceſſity.

III. To be attentive if the choſen chord can time with the inferior parts in what precedes, and what follows, by a good fundamental ſucceſſion; and when that cannot be done, to return to our former plan.

IV. Never to vary the note of the fundamental baſs till we have exhauſted all the conſequent notes of the parts below, which can enter into its accord, or till ſome ſyncopating note in the air, may receive two or more notes of the baſs, to prepare the preſerved diſſonances in a regular continuance.

V. To ſtudy well the inter-union of phraſes, the poſſible ſucceſſion of cadences, whether full, whether avoided, and particularly the ſtops which come generally every four or two meaſures, for the purpoſe of making them always fall on perfect or on irregular cadences.

VI. Laſtly, to obſerve all the foregoing rules for the compoſition of the fundamental baſs. Here then, are the chief obſervations to be made for finding one under a given air, for there are often ſeveral to be found; but whatever may be ſaid, if the air has accent and character, there is one fundamental baſs only which we can adapt to it.

After having given a clear ſummary of the method of compoſing a fundamental baſs, there would remain alſo to ſhew the

ſtethod of transforming it into a thorough baſs; and that would be eaſy, if it were neceſſary to look only at the diatonic courſe, and the pleaſing notes of this baſs; but let us not think, that the baſs, which is the guide and ſupport of harmony, the ſoul, and, to uſe the expreſſion, the interpreter of the air, is confined to rules ſo ſimple. There are others which ariſe from a more ſure and radical principle, a principle ingenious, tho' concealed, which has been felt by all the artiſts of genius, without having been ever unravelled by any one. I think I have hit on the bud of it in my Letter on the French Muſic: I have have ſpoken ſufficiently for thoſe who comprehend me:—I ſhall never explain it clearly to thoſe who do not. (Vide through the whole, UNITY of MELODY.)

I make no mention here of the ingenious Syſtem of Monſ. Serre, of Geneva, or of his double fundamental baſs, becauſe the principles, which he had examined with a ſagacity worthy of praiſe, have been ſince expoſed to view, by Monſ. Tartins, in a work, which I will treat of before the concluſion of the preſent. (Vide SYSTEM.)

BEATING, A particularity or grace in the French airs, which conſiſts in elevating and ſtriking a quaver, on a note inſtantaneouſly begun. There is this difference between the cadence and the beating, that the cadence begins by the note ſuperior to that whereon it is marked, after which we ſtrike alteratively the ſuperior note, and the true one, whereas the beating begins by the ſound itſelf of the note that bears it, after which we ſtrike alternatively *that* note, and that which is above it, *E, G:* theſe tones of the throat, mi, re, mi, re, mi, re, ut, ut, are a cadence; and the following re, mi, re, mi, re, mi, re, ut, re, mi, are a beating.

BEATINGS, in the plural, Whenever two ſtrong and well ſuſtained notes, like thoſe of the organ, are harſh and diſſonant together, on the approach of a conſonant interval, they form, by more or leſs frequent ſhakes, an irregularity of ſound which impreſſes on the ear, an effect nearly ſimilar to the beating of the pulſe on the hand, for which reaſon, Monſ. Sauveur has given them alſo the term of beatings: theſe ſtrokes become ſo much the more frequent, as the interval draws nearer to juſtneſs, and whenever they reach it, they are confounded with the vibrations of the ſound.

Monſ. Serre pretends, in his Eſſay on the principles of Harmony, that theſe beatings, produced through the concurrence of two ſounds, are only an acouſtic appearance, occaſioned by the vibrations of their two ſounds. Theſe beatings, according to him, have equally a place when the interval is conſonant, but the rapidity, in which they are then counfounded, not ſuffering them to be diſtinguiſhed by the ear, there ought to follow, not

an

an abſolute ceſſation of the ſtrokes, but an appearance of a flat and thorough ſound, a kind of leſs perceptible humming, ſuch an one preciſely as reſults in the proofs cited by Monſ. Serre, and ſince expanded by Monſ. Tartins, from the concurrence of two ſharp and conſonant ſounds, (under the word ſyſtem may be ſeen, that the diſſonances alſo produce them). "What is "very certain," continues Monſ. Serre, "is, that their beat-"ings, their co-incident vibrations, which are followed with "more or leſs rapidity, are exactly ſimilar in meaſure to the "vibrations, which the fundamental ſound would really pro-"duce, if, thro' means of a third corpo ſonoro, it was actually "made to reſound."

This very ſpecious explanation is not perhaps without its difficulties; for the connection of two ſounds is never more compoſed than when it approaches to the ſimplicity which produces from it a conſonance; and the vibrations ought never to coincide more rarely than when they reach almoſt to an iſochroniſm; from whence it muſt follow, in my opinion, that the Beatings ought to ſlacken, in proportion as they become more quick, then in an inſtant reunite, in the moment that the concord is juſt.

The obſervation of the beatings is an excellent rule to be conſulted on the beſt ſyſtem of modification. (Vide MODIFICATION) For it is evident, that amongſt all poſſible modifications, *that* which leaves the feweſt beatings in the organ, is moſt pleaſing to nature and the ear. Moreover, it is a conſtant and well-known circumſtance among organiſts, that the changes of thirds major, produce beatings more forcible and more diſagreeable than thoſe of the Fifths. In this caſe nature herſelf has choſen.

BATTERY, The method of ſtriking and repeating ſucceſſively on different ſtrings of an inſtrument, the various ſounds which compoſe a concord, and of paſſing in this manner from concord to concord by the ſame variation of notes. This battery is but a continued arpeggio, but the whole of its notes are detatched inſtead of being conjoined as in the arpeggio.

BEATER OF TIME, One whoſe office is in beating time in a concert. (Vide the following Article.)

TO BEAT TIME, Is to ſpecify the variety of time, by motions of the hand or foot, which denote its duration, and by which all ſimilar meaſures are rendered exactly equal in their chronical powers or time in the execution. There are meaſures which are ſtruck by one time only, others by two, three, or four, which is the greateſt number of times ſpecified, that can be contained within a meaſure. A four tim'd meaſure alſo can always be divided into two meaſures of two times each. In all their different meaſures, the beaten time is always on the note

which immediately follows the bar: the raiſed time is always that which precedes, unleſs it happens that the meaſure contains but one time, and even in that caſe we muſt always ſuppoſe a weaker time, ſince we cannot beat without having raiſed.

The degrees of ſlowneſs or of quickneſs which are given to meaſure, depend on many circumſtances. 1ſt, From the powers of the notes which compoſe the meaſure, we may very plainly ſee, that a meaſure which contains a circle, viz. 𝅝, ſhould be ſtruck more forcibly, and have a longer duration than that which contains a crotchet, viz. ♩ 2dly, From the movement expreſſed by the French or Italian word, which is often placed at the beginning, *Gai*, *Vite*, *Lent*, *&c.* All theſe words denote an equal number of modulations in the movement of a ſimilar kind of meaſure. 3dly and laſtly, From the character of the air itſelf, which, if well executed, will neceſſarily ſtrike us with its true movement.

The French muſicians beat time differently from the Italians. The one, in a four timed meaſure, ſtrikes the two firſt ſucceſſively, and raiſes the others. They ſtrike alſo the two firſt in a three tim'd meaſure, and raiſe the third. The French ſtrike the firſt time only, and ſpecify the others by different motions of the hand on the right and left. However, the French muſic would be in want of a well-marked meaſure, much more than the Italian, for it does not convey its cadence within itſelf; its movements have no natural preciſion: the meaſure is extended or diminiſhed at the option of the ſinger. How greatly are our ears diſguſted at the French opera with the diſagreeable and continual noiſe, which is made by the ſtrokes of him who beats the time, and who has been ingeniouſly compared to a wood-cutter felling a tree! But 'tis an inevitable evil. Without that noiſe the meaſure could not be felt. The muſic itſelf does not expreſs it. On which account foreigners can perceive no movements in the French airs. If we pay attention to this, we ſhall find, that herein lies one of the ſpecific differences between the French and Italian muſic. In Italy, the meaſure is the whole ſpirit of the muſic; 'tis a well expreſſed meaſure which gives it that accent which renders it ſo delightful. 'Tis the meaſure alſo which directs the muſician in the execution. In France, on the contrary, 'tis the muſician who directs the meaſure: He enervates and diſfigures it without heſitation or ſcruple. But what am I ſaying? The excellence of taſte itſelf conſiſts in not ſuffering it to be perceived; a precaution of which (into the bargain) it ſtands in no great need. The opera of Paris is the only European theatre where the meaſure is ſtruck without being followed. In every other part they follow it without beating.

There

There reigns herein a general error, which a little reflection will eaſily aboliſh. It is imagined, that a hearer beats the time of an air which he hears, only becauſe he feels it forcibly; and 'tis, on the contrary, becauſe it is not ſufficiently ſenſible, or that he does not well enter into its ſpirit, that he endeavours, by the addition of motions of the hand or foot to make amends for what is wanting in this particular to the ear. As little as a piece of muſic regards its cadence, we may ſee the generality of the French, in attending to it, make a thouſand contorſions, and an inconceivable jargon to aſſiſt the meaſure in its courſe, and the ear, in feeling it. Subſtitute Italians or Germans in their place, you will not perceive the leaſt noiſe, or ſee the moſt minute geſture that has any connection with the meaſure. Is it, poſſibly, that the Germans and Italians were leſs ſenſible of the meaſure than the French? There are ſeveral of my readers who would not in the leaſt ſcruple in ſaying ſo; but would they alſo advance, that the moſt ingenious muſicians are thoſe who enter leaſt into the ſpirit of the muſic. It is inconteſtable that they are thoſe who *beat* the leaſt, and when, by dint of exerciſe, they have gained the habit of always feeling it, they do not *beat* at all: this is a proof of experience that may be ſeen daily throughout the world. It may be ſaid alſo, that the ſame perſons, whom I accuſe of beating time only thro' an inſufficient feeling, do not beat in the airs where it is not to be felt; and I anſwer, that in that caſe 'tis becauſe they do not feel it at all. The ear muſt be ſtruck at leaſt with ſome kind of connection with the meaſure, that inſtinct may endeavour to ſtrengthen it.

The ancients, ſays Monſ. Burette, beat time in many different methods. The moſt general conſiſted in the motion of the foot, which was raiſed from the ground, and ſtruck it alternatively, according to the meaſure of the two equal or unequal times. (Vide RHYME.) This was commonly the office of the muſic-maſter, who was called Κορυφαιος, becauſe he was ſituated in the midſt of the choir of muſicians, and in an elevated ſituation, that he might be more eaſily ſeen and heard by all the company. Theſe time beaters were called in Greek ποδόκτυποι and ποδοψόφοι, on account of the noiſe of their feet ςυντονάριοι, on account of the uniformity of their geſtures, and, if I may be allowed the expreſſion, of the monotony of the rhyme, which they always beat á deux tems. They were called in Latin pedarii, podarii, pedicularii. They beat time not only with the foot, but alſo with the right hand, and conjoined all the fingers to ſtrike within the hollow of the left, and he who expreſſed the harmony in this manner, was called Manuductor. Beſide this, beating of hands and noiſe of ſlippers, the ancients had ſtill, for

ſtriking the time, that of cockell-ſhells, oyſter-ſhells, and the ſmall bones of animals, which they ſtruck againſt one another, as we at preſent perform with caſtanets and other ſimilar inſtruments. All this ſo diſagreeable and ſuperfluous noiſe among us, on account of the equality of the meaſure, was not the ſame in thoſe times, where the frequent changes of feet and rhyme required a concord much more difficult, and gave to the noiſe itſelf a variety much more harmonious, and more ſtriking. We may moreover ſay, that the cuſtom of beating in this manner was introduced only in caſe the harmony ſhould become languiſhing, and ſhould loſe its accent and energy. The higher we riſe, the fewer examples we find of theſe beaters of time, and in muſic of the remoteſt antiquity, we cannot diſcover any.

TO BAWL, Is to exert the voice in ſinging in ſuch a manner, as that the ſounds can be no longer diviſible, and have a greater reſemblance to cries than ſinging. The French muſic muſt be bawled: 'tis in that that its moſt forcible expreſſion conſiſts.

BI, A ſyllable which ſeveral foreign muſicians uſed formerly for the pronunciation of the ſound of the gamut, which is called by the French ſi. (Vide SI.)

BISCHROMA, An Italian word which expreſſes triple crotchets. Whenever this word is written under a collection of notes, equal, and of a greater power than the triple crotchets, it denotes, that the powers of thoſe notes ſhould be divided into triple crotchets, according to the real diviſion which is generally found in the firſt time, 'Tis an invention of authors adopted by imitators, particularly in the partitions, to ſpare pains and paper. (Vide CROTCHET.)

BOREE, A kind of air, appropriated to the dance which goes under the ſame name as that which is generally ſuppoſed to take its origin from Auvergne, and which is ſtill in uſe in that province. The boree has two lively times, and begins with a crotchet before it is ſtruck. It ſhould have, as the generality of dances, two parts and four meaſures, or a multiple of four to each. In theſe kinds of airs we frequently join the latter half of the firſt time to the former of the ſecond by a ſyncopated minum.

BOUTADE, An ancient kind of leſſer ballet, which was executed, or appeared to be, impromptu. The muſicians have ſometimes given this name to pieces or ideas which they executed in the ſame manner on their inſtruments, and which are otherwiſe filled caprices or fantaſies. (Vide thoſe words.)

TO BRAWL, Is to outdo the natural extent of the voice, and ſing with all our poſſible violence, as the church-wardens in the villages of Lutrin, and ſeveral muſicians elſewhere.

BRAWL,

BRAWL, A kind of dance very lively, which is performed in a circle, with a ſhort tune in rondeau, that is to ſay, with the ſame concluſion at the end of every couplet.

BREF, An adverb which we often find in ancient muſic, written above the note which concludes a phraſe or an air, to denote that this finale ſhould be leſſened by a quick and ſhort ſound, inſtead of preſerving its entire force. (Vide To Clip.) This word is however uſeleſs, as we have a ſign which may expreſs it.

BREVE, A note which paſſes with double the quickneſs of the preceding; for which reaſon the crotchet is ſhort after a pricked minum, and the quaver after a pricked crotchet. We could not call a note that is equal to the half of the preceding a breve, wherefore a crotchet is not breve after a ſimple minum, nor a quaver after a crotchet, unleſs we make uſe of a ſyncope.

In church muſic it is quite different. To anſwer exactly to the quantity of ſyllables, the breve is equal to the half of a long ſyllable. Moreover, a long note has often a tail to diſtinguiſh it from a ſhort, which never has any, which circumſtance is a direct oppoſition to muſic, where the round which has no tail, is the double of the minum which has one. (Vide Measure, Powers of the Notes.)

BREVE, Is alſo a name which our ancient muſicians gave, and the Italian ſtill give to that old kind of note that we expreſs by the term quarrée. There were two ſorts of Breve's, for inſtance, the true and perfect, which is divided into three equal parts, and is equal to three rounds, or ſemi-breves in triple meaſure; and the changed or imperfect breve, which we divide into two equal parts, and which is equal to two ſemi-breves only in a double meaſure. This laſt kind of breve, is that which is marked by the ſign of C barré, and the Italians call ſtill by the name of alla breve, the meaſure of two quick times, which they make uſe of in pieces of muſic, da Capella. (Vide Alla Breve.)

BUZZING, A thorough baſs which is always continuing in the ſame ſound, as are thoſe generally from the inſtruments which we call Bag-pipes.

BUCOLIASM, An ancient ruſtic ſong. (Vide Song.)

# C.

C. This letter, in our ancient muſic, was the ſign of the minor imperfect extent, from whence the ſame letter has continued among us, as that of a four timed meaſure, which includes exactly an equal power of notes. (Vide MODE.)

C BARRE, The ſign of a quick four timed meaſure, or a ſet two timed. It is marked by a perpendicular line which paſſes from the top to the bottom of the C within the ſtave, thus C.

C SOL UT, C SOL FA UT, or ſimply C, A character or term of muſic, which indicates the firſt Note of the gamut, which we call ut, (Vide GAMUT.) It is alſo the ancient ſign of one of the three keys of muſic. (Vide CLEFF.)

CACOPHONY, A diſcordant uniſon of ſeveral ill choſen, or diſagreeing ſounds.—This word is derived from κακος, ill, and φωνη, a ſound. For which reaſon it is called cacaphony by the generality of muſicians in an improper pronunciation.

CADENCE, The termination of an harmonic phraſe, either on a ſtop, or a perfect concord, or, to ſpeak in a more extenſive ſenſe, it is every paſſage from a diſſonant accord to any other whatſoever, for we can never remove from a diſſonant accord but by an act of cadence. Moreover, as every harmonic phraſe is by neceſſity conjoined by diſſonances expreſſed or underſtood, it follows, that harmony in general is properly a collection of cadences only.

That which we call act of cadence, takes it origin always from two fundamental ſounds, one of which denotes the cadence, and the other its termination.

As there can be no diſſonance without a cadence, neither can there be any cadence without its diſſonance expreſſed or underſtood; for to give expreſſion to a ſtop, ſomething anterior muſt ſuſpend it, and this ſomething can be nothing, unleſs a diſſonance, or the implicit ſentiment of that diſſonance: were it otherwiſe, the two concords, being equally perfect, we might make a pauſe on the firſt; the ſecond would not diſcover itſelf, and therefore muſt become unneceſſary. The concord formed on the firſt ſound of a cadence, ſhould, conſequently, be always diſſonant, that is to ſay, ſhould ſuſtain or ſuppoſe a diſſonance.

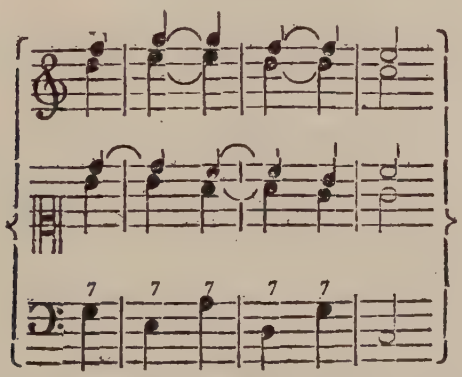
In regard to the ſecond, it may be conſonant or diſſonant, juſt as we chuſe, either to preſerve or to elude the ſtops. If it be conſonant, the cadence is full; if diſſonant, the cadence is avoided or imitated.

We generally reckon four kinds of cadences, that is to ſay, perfect cadence, imperfect or irregular cadence, cadence interrupted, and broken cadence. Theſe are the denominations whic

Monſ. Rameau has given to them, and the reaſons whereof ſhall be ſeen hereafter.

I. Whenſoever after a concord of the ſeventh, the fundamental baſs deſcends from the fifth on a perfect concord, 'tis a full perfect cadence, which proceeds always from a dominant tonic to a tonic; but if the perfect cadence be avoided by a diſſonance added to the ſecond note, we may begin a ſecond cadence; in avoiding the firſt on that ſecond note, avoid this ſecond cadence, and begin a third on the third note; then go on in the ſame plan as far as we pleaſe, by aſcending from the fourth, or deſcending from the fifth on all the chords of the tune, and this forms a ſucceſſion of avoided perfect cadences. In this ſucceſſion, which is without a doubt, the moſt harmonious, two parts, viz. thoſe which form the ſeventh and the fifth deſcend on the third and eighth of the following concord, whereas the two other parts, viz. thoſe which form the third and eighth, remain to compoſe in their turn, the ſeventh and the fifth, and deſcend immediately in an alternate direction with the two others. In this manner ſuch a ſucceſſion promotes a deſcendant harmony. It ſhould never ſtop but on a dominant tonic, to fall immediately on the tonic by a full cadence.

*Perfect Cadences avoided.*



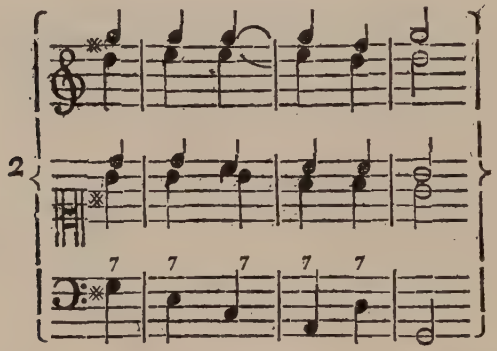

II. If the fundamental baſs, inſtead of deſcending from the fifth after a concord of the ſeventh, deſcends only on the third, the cadence is called interrupted. This can never be full, but it muſt neceſſarily fall out, that the ſecond note of this cadence ſuſtains another diſſonant accord. We may in the ſame manner continue to deſcend from the third, or aſcend from the ſixth, by concords of the ſeventh, which makes a ſecond ſucceſſion of avoided cadences, but much leſs perfect than the preceding, for the ſeventh, which unites with the third in the perfect cadence,

unites

unites here with the eighth, whence proceeds a leſſer harmony, and which makes alſo two eighths to be underſtood, ſo that to avoid them, we muſt either remove the diſſonance or deſtroy the harmony.

Whereas the interrupted cadence can never be full, it follows thence that a phraſe can never be concluded by it, but we muſt have recourſe to the perfect cadence to make the concord dominant be underſtood.

*Interrupted Cadences avoided.*



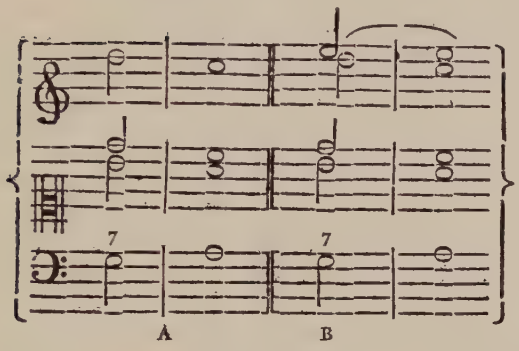

The interrupted cadence forms alſo, by its ſucceſſion, a deſcendant harmony, but there is one ſound only which deſcends. The three others remain in order to deſcend, each in its turn, in a ſimilar direction.

There are ſome who erroneouſly miſtake an overthrow of the perfect cadence for an interrupted cadence, wherein the baſs, after a concord of the ſeventh, deſcends from the third, ſuſtaining a concord of the ſixth, but every one muſt ſee that ſuch a courſe, not being fundamental, can by no means conſtitute a cadence proper to it.

III. Broken cadence is that wherein the fundamental baſs, inſtead of aſcending from the fourth after a concord of the ſeventh, as in the perfect cadence, aſcends only a degree. This cadence is oftenеſt avoided by a ſeventh on the ſecond note. It is certain that it cannot be rendered full but by licence, for in ſuch a caſe there is neceſſarily a want of uniſon.

*Broken*

*Broken Cadence*
*Full with a Tie* A.
*Avoided with a Tie* B.




A ſucceſſion of broken cadences avoided is ſtill deſcendant. Three ſounds therein deſcend, the eighth remains alone to prepare the diſſonance; but ſuch a ſucceſſion is rough, badly modulated, and is ſeldom put in practice.

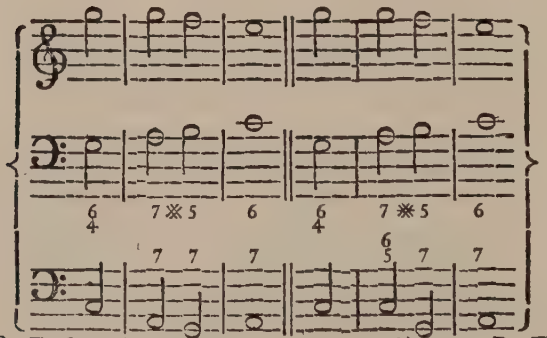
IV. When the Baſs deſcends by an interval of the fifth, from the dominant on the tonic, it is, as I have ſaid, an act of perfect cadence. If, on the contrary, the baſs aſcends by a fifth from the tonic to the dominant, 'tis an act of irregular and imperfect cadence. To diſcover it, we add to the concord of the tonic a ſixth major, whence this concord takes the name of ſixth added. (Vide Concord.) This ſixth, which forms a diſſonance on the fifth, is alſo healed as a diſſonance on the fundamental baſs, and, as ſuch, obliged to extend itſelf by aſcending diatonically on the third of the following concord.

The imperfect cadence forms almoſt an abſolute oppoſition to the perfect cadence. In the firſt concord of each we divide the fourth, which is placed between the Fifth and the eighth, by a diſſonance, which forms therein a new third, and this diſſonance ought to be reduced on the following concord; therein lies what theſe two cadences have in common with each other, but hereafter the contrariety which they maintain.

In the perfect cadence, the ſound which is added fixes itſelf at the top of the interval of the fourth, near to the eighth, forming a third before the fifth, and produces a diſſonance minor, which is avoided by deſcending; whereas the fundamental baſs aſcends from the fourth, or deſcends from the fifth of the dominant to the tonic, to maintain a perfect pauſe. In the imperfect cadence, the ſound which is added is fixed at the bottom of the interval of the fourth, near to the fifth, and forming a third

with the eighth, it produces a major diſſonance, which is avoided by aſcending; whereas the fundamental baſs deſcends from the fourth, or aſcends from the fifth of the tonic to the dominant, to eſtabliſh an imperfect pauſe.—Monſ. Rameau, who firſt made mention of this cadence, and who admits many exceptions from it, forbids us in his Treatiſe on Harmony, page 117, to admit that wherein the added ſound is in the flat, ſuſtaining a concord of the ſeventh, and that, with a very weak argument, which I have made mention of under the word concord. He has taken this concord of the ſeventh as fundamental, ſo that we muſt preſerve a ſeventh by another ſeventh, a diſſonance by an equal diſſonance, by a ſimilar movement on the fundamental baſs. If ſuch a method of treating the diſſonances could be ſuffered, we had as well ſhut our ears, and throw our rules into the flames. But the harmony, under which this author has placed ſo ſtrange a fundamental baſs, is clearly overthrown by an imperfect cadence, avoided by a ſeventh added upon the ſecond note.

*Reverſion of the Sixth added.*



*B. F. from M. Rameau.* *The true B. F.*

And this is ſo true, that the thorough baſs, which ſtrikes the diſſonance, is neceſſarily obliged to aſcend diatonically to preſerve it, without which the paſſage could be of no avail. I confeſs, that in the ſame work, page 272, Monſ. Rameau gives a ſimilar example with the fundamental baſs; and ſince he diſapproves in formal terms, the overthrow which reſults from this baſs, ſuch a paſſage ſerves only to diſcover, in his book, one contradiction more. And as much as this ſame author, in a future work (Gener. Harmon, page 186) ſeems to recollect the true origin of this paſſage; he ſpeaks of it ſo obſcurely, and ſays again ſo poſitively, that one ſeventh is preſerved by another, that we may ſee clearly, that he only takes therein a comparative view, and that at the bottom his ſentiments remain the ſame, ſo that we have the privilege of retorting againſt him the reproach

reproach which he confers on Maſſon, not to have known how to ſee the imperfect cadence in one of his perverſions.

This ſame imperfect cadence extends itſelf alſo from the ſub-dominant to the tonic. We may alſo avoid it, and give it, by this method, a ſucceſſion of ſeveral notes, whoſe concords will compoſe an aſcendant harmony, in the which the ſixth and eighth aſcend on the third and fifth of the concord, whereas the the third and fifth remain to form the eighth and prepare the ſixth.

No author that I know of, before Monſ. Rameau, has ſpoken of this harmonic riſe, himſelf has only given us a view of it; and it is certain, that we could neither practiſe a long continuance of ſimilar cadences, on account of the major ſixths which would remove the modulation, nor even fill the whole of its harmony without a precaution.

After having laid open the rules and conſtitution of the different cadences, let us take a view of the reaſons which Monſ. D'Alembert gives, from Monſ. Rameau, of their denominations.

The perfect cadence conſiſts in a courſe of the fifth, by deſcending; and, on the contrary, the imperfect conſiſts in a courſe of the fifth in aſcending. Herein lies the reaſon: When I ſay ut ſol, ſol is already encloſed within ut, ſince every ſound, as ut, carries its twelfth with it, the fifth of which, viz. ſol, is the eighth; ſo when we go from ut to ſol, 'tis the generating ſound which paſſes to its product, in ſuch a manner though, that the ear always wiſhes to return to this firſt generator; on the contrary, when we ſay ſol ut, 'tis the product which returns to its generator, the ear is ſatisfied, and wiſhes nothing more. Moreover in this courſe, ſol ut, the ſol makes itſelf again underſtood in ut; by this means the ear hears at once the generator and its product, whereas, in the courſe ut ſol, the ear, which in the firſt ſound had heard ut and ſol, hears nothing more in the ſecond than ſol without ut. Wherefore the ſtop or cadence from ſol to ut, has a greater perfection than the cadence or ſtop, from ut to ſol.

It ſeems, continues Monſ. D'Alembert, that in the principles of Monſ. Rameau, we may furthermore explain the effect of the broken cadence, and the interrupted.* Let us ſuppoſe, for this purpoſe, that after a concord of the ſeventh, ſol, ſi, re, fa, we aſcend diatonically, by a broken cadence to the concord la, ut, mi, ſol: It is viſible that this concord is deſtroyed by the concord of the ſub-dominant, ut, mi, ſol, la; wherefore, the courſe of broken cadence is equivocal to this ſucceſſion, ſol, ſi, re, fa, ut, mi, ſol, la, which is nothing different from a perfect cadence, in the which ut inſtead of being uſed as tonic is rendered ſub-dominant.

dominant. Every tonic, ſays Monſ. D'Alembert, can always be rendered ſub-dominant by changing its mode. I will add, that it can even bear the concord of a ſixth added, without undergoing any change.

In regard to the interrupted cadence, which conſiſts in deſcending from one dominant on another by the interval of the third in this method, ſol, ſi, re, fa,—mi, ſol, ſi, re, it ſeems, that we may ſtill explain it. In effect, the ſecond concord, mi, ſol, ſi, re, is overthrown by the concord of the ſub-dominant, ſol, ſi, re, mi; for which reaſon the interrupted cadence is equivocal to this ſucceſſion, ſol, ſi, re, fa,—ſol, ſi, re, mi, where the note ſol, after having been uſed as dominant, is rendered ſub-dominant by changing the mode, which is permitted, and left to the option of the compoſer.

Theſe explanations are ingenious, and ſhew what uſe we may make of the double employ in thoſe paſſages, which ſeem to have the leaſt connection with it. However, the intention of Monſ. D'Alembert, is not ſurely that we ſhould make uſe of them in reality in theſe paſſages for practice, but only for the comprehenſion of the changes. For inſtance, the double employ of the interrupted cadence would prevent the diſſonance fa, by the diſſonance mi, which is contrary to rules, to the utility of rules, and particularly to the judgment of the ear; for in the ſenſation of the ſecond concord, ſol, ſi, re, mi, at the continuance of the firſt ſol, ſi, re, fa, the ear is more attached towards the removal of the re, than to admit the mi as diſſonant. Beginners, in general, ſhould be acquainted, that the double employ may be admitted on a concord of the ſeventh, in the continuance of a conſonant accord; but that as ſoon as the concord of the ſeventh follows one ſimilar to itſelf, the double employ can have no admiſſion. It is neceſſary that they know alſo that the tone ought not to be changed by any other diſſonant accord than the ſenſible; whence it follows, that in the broken cadence we cannot ſuppoſe any variation of tone.

There is another kind of cadence which the muſicians do not look upon as ſuch, and which, according to its definition, is, however, a true one: 'Tis the paſſage of the concord of the ſeventh diminiſhed on the ſenſible note, to the concord of the tonic. In this paſſage, there is found no harmonic union, and it is the ſecond example of this default, in what is called cadence. One might regard the harmonious tranſitions as methods of avoiding this ſame cadence, in the ſame manner as we avoid the perfect cadence of a dominant to its tonic, by a chromatic tranſition, but I confine myſelf here to the explanation of eſtabliſhed denominations only.

CADENCE,

CADENCE, Is, in terms of ſinging, that motion of the throat which the Italians call trillo, and which we call warbling, which is generally on the laſt note but one of a muſical phraſe, from whence it has, doubtleſs, taken the name of Cadence. We ſay, "That actreſs has a fine cadence." "Such a ſinger ſtrikes the cadence ill."

There are two kinds of cadences. The one is the full cadence, which conſiſts in not beginning the warbling of the voice, until we have reſted on the higher note: The other is called broken cadence, and in that we begin the trill of the voice without any preparation.

The CADENCE, Is a quality of good muſic, which gives to thoſe who execute it, or who liſten to it, a lively feeling of the meaſure, ſo that they remark it, and perceive it fall juſtly, without reflecting on it, as it were thro' inſtinct. This quality is particularly requiſite in the airs for dancing. "This minuet has an agreeable Cadence." "That chacon wants a cadence." The cadence being, in that ſenſe a quality, is generally preceded by the definite article *the*, whereas the harmonic cadence bears, as individual, the numerical article, viz. A perfect *cadence*.—*Three cadences* avoided.

Cadence ſignifies alſo the conformity of the dancer's ſteps, with the meaſure, expreſſed by the inſtrument. He goes out of *cadence*, or tune.---He keeps well the *cadence* or time. For this reaſon, the muſic maſter denotes the movement of the minuet, by beating time, at the beginning of each meaſure; whereas the dancing maſter beats time only every two meaſures, becauſe ſo much is requiſite to form the four ſteps of the minuet.

CADENCED, A well cadenced muſic is that wherein the cadence is moſt ſenſible, wherein the rhime and harmony moſt perfectly concur in giving life, as it were, to the movement; for the choice of concords is by no means indifferent to denote the time and meaſure; and we ought not to practiſe indifferently the ſame harmony on the ſtroke and its riſe. Neither is it ſufficient to divide the meaſures into equal powers, to make their equal returns be felt, ſince the rhime does not depend leſs from the accent which is given to the melody, than from the powers which are given to the notes, for we may have times very equal, and yet very ill cadenced: 'Tis not ſufficient that there *be* an equality, but it muſt be of ſuch a nature as to be felt.

CADENZA, An Italian word, by which we denote a point d'orgue, or ſign of a pauſe, not written, and which the author leaves to the will of him who performs the principle part, for the purpoſe of his making, relatively to the character of the air, the paſſage moſt ſuitable to his voice, his inſtrument, or his taſte.

This ſign of a pauſe is called Cadenza, becauſe it is generally made on the firſt note of a final cadence; and it is alſo called arbitrio, on account of the liberty which we learn therein to the performer to ſuit his own ideas, and follow his particular taſte. The French muſic, particularly the vocal, which is extremely ſtrict, leaves no ſimilar liberty to the ſinger, which, were it ſo, he would with difficulty know how to uſe.

The CANARIES, A kind of gigue, the air of which is even of a more lively movement than that of the ordinary gigue, for which reaſon, it is ſometimes marked by $\frac{3}{16}$: This dance is at preſent no longer in uſe. (Vide GIGUE.)

CANEVAS, It is by this name that, in the opera of Paris, thoſe words are called, which the muſician adjuſts to the notes of an air, as a parody. From theſe words, which have no ſignification, the poet adjuſts others, which expreſs little more, wherein in general we find no more ingenuity than ſenſe, where the French proſody is infamouſly murdered, and which are therefore with great reaſon ſtiled

CANON; This was, in the ancient muſic, a rule or method to determine the reference and connection of intervals. They gave alſo the name of Canon to the inſtrument, by which they diſcovered theſe connections, and Ptolemy has given this ſame name to the book which we have of his on the reference of all the harmonic intervals. They called in general the diviſion of the monochord by all theſe intervals, ſextis canonis, and the monochord, thus divided, or the Table which repreſented it, Canon univerſalis. (Vide MONOCHORD.)

CANON, In modern muſic, is a kind of fugue, which is called perpetual, becauſe the parts ſucceeding each other, continually repeat the ſelf-ſame air.

Formerly, ſays Zarlin, there were placed at the head of the perpetual fugues, which he calls *Fughe in conſequenza*, certain notes which directed the method of ſinging thoſe kinds of fugues, and theſe directions, being properly the rules of theſe fugues, were called Canoni-Rules---Canons --From thence, taking the title for the thing, that kind of fugue, by Metonymy, has been ſtiled canon.

The canons, eaſieſt to be made, and moſt general, fix them at the uniſon, or at the 8th; that is to ſay, that every part repeats, on the ſame tone, the air of that which precedes it. For the compoſition of this kind of canon, we have only to chuſe an air to our liking; add thereto a partition, as many parts as we pleaſe with equal notes, then, from all theſe parts ſung in ſucceſſion, to form a ſingle air; uſing our endeavours that this ſucceſſion may produce a ſomething completely agreeable, whether it be in the harmony, or in the canto.

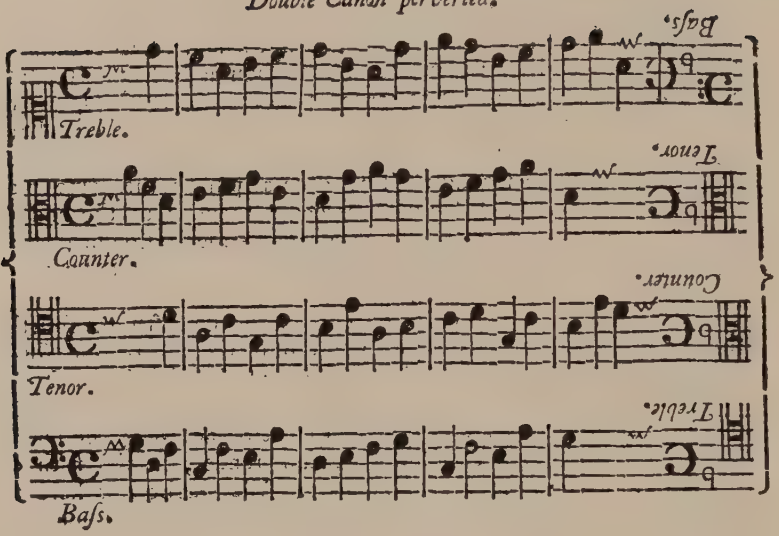
To

To execute a ſingle canon, he, who is to ſing the firſt, begins alone, ſinging the air throughout, and then again beginning it without interrupting the meaſure. As ſoon as he has finiſhed the firſt couplet, which ought to ſerve as a continual ſubject, and on which the whole of the canon has been compoſed, the ſecond enters, and begins this ſame firſt couplet, whilſt he who entered firſt continues the ſecond: The others purſue the ſame plan ſucceſſively, as ſoon as he who precedes them is at the end of the firſt couplet; in re-beginning after this method, continually, there can be found no general concluſion, and they extend the canon to whatſoever length they pleaſe.

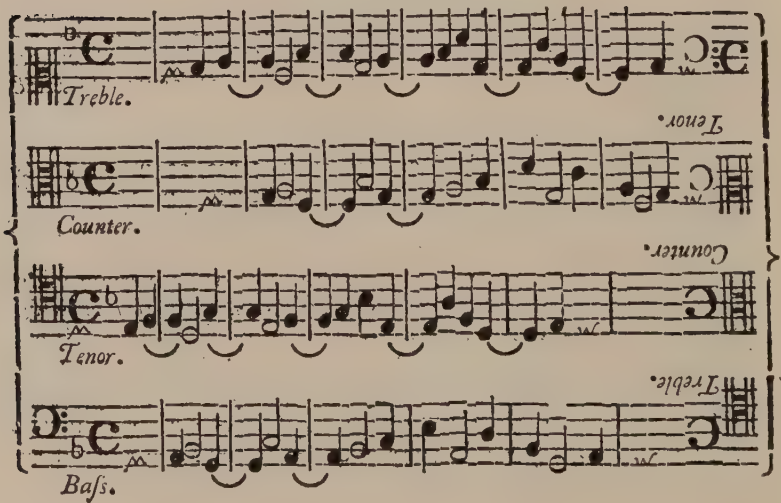
We may alſo take a perpetual fugue in the fifth or fourth, that is to ſay, that every part ſhall repeat the air of the foregoing, a fifth or a fourth higher or lower. But in that caſe the canon muſt be ſuppoſed quite entire, *di prima intenzione*, as the Italians ſay, and B ſharp's or dieſis's muſt be added to the notes, whoſe natural degrees could not exactly render, in the fifth or fourth, the air of the preceding part. We ought not here to pay the leaſt regard to any modulation, but only to the identity of the air, which renders the compoſition of the canon more difficult; for every time that a part receives its fugue, it enters into a different tone: it has variations in almoſt every note, and what is worſe, no one part is found at the ſame time in the ſame tone as another; which occaſions that theſe kinds of canons, beſides being difficult to follow, never form an agreeable effect, however good its harmony may be, and however well they may be ſung.

There is a third kind of canons very ſcarce, as much on account of their exceeding difficulty, as becauſe being generally bereft of arguments, they have no other merit than having coſt a great deal of trouble to compoſe them. This is what might be called double canon varied, as much through the inverſion which is placed therein in the ſinging of the parts, as thro' *that* which we find amongſt the parts themſelves in ſinging them. There is ſuch an artifice in this kind of canons, that whether we ſing the parts in their natural order, or change the paper to ſing them in a retrogade direction by beginning at the end, and placing the baſs above, we always find a good harmony, and a regular canon.

*Double Canon perverted.*




*Another Double Canon perverted.*




The above examples of thoſe kinds of canons are taken from Botempi, who alſo gives rules for the compoſition of them. But we ſhall find the true principle of theſe rules under the word Syſtem, in the expoſition of that of Monſ. Tartins.

To

To compoſe a canon where harmony may be a little varied, the parts muſt not follow each other too ſuddenly, and one muſt not enter till ſometime after the other. When they follow one another with ſuch velocity, as, at a pauſe, or demi-pauſe, there is no time for making ſeveral concords paſs, and the canon cannot fail of being monotonous. But it is a method of making without much trouble, a canon at whatever part we pleaſe, for a canon of four meaſures only will be inſtantly of eight, if they follow each other at the demi-pauſe; and in every meaſure which is added, two other parts will be alſo gained. The emperor Charles VI. who was a great muſician, and an excellent compoſer, took great pleaſure in making and ſinging canons. Italy is ſtill full of very fine canons, which had been made for that prince, by the beſt maſters of the country.

CANTABILE, An Italian adjective, which ſignifies, convenient for ſinging. It is proper to every air, whoſe intervals, in whatſoever meaſure they may be, are not too large, nor the notes too precipitate, ſo that they can be eaſily ſung without forcing or injuring the voice. The word cantabile is by degrees alſo paſt into the French language.

CANTATA, A kind of little lyric poem, which is ſung with accompaniments, and which, though compoſed for a private room, ought to receive from the muſician the fire and graces of imitative and theatrical muſic. Cantatas are generally compoſed of three recitatives, and as many airs. Thoſe which are a recital, and the airs, their maxims are always cold and diſagreeable: The muſician ought to aboliſh them. The beſt are thoſe wherein the principal perſon ſpeaks himſelf in a ſituation lively and affecting; for our cantatas are in general compoſed for one voice. There are, however, ſome for two voices, in form of a dialogue, and thoſe are ſomewhat agreeable when the compoſer knows the art of introducing ſomething in them of an intereſting nature. But as a few preambles are always neceſſary to make a kind of expoſition, and give the hearer ſome ideas, 'tis not without reaſon that cantatas have changed their form, and that even in concerts they have ſubſtituted opera ſcenes in their place. The mode of cantatas takes its origin from Italy, as we may ſee by their name in Italian, and 'tis Italy alſo which firſt placed bounds to them. The cantatas made there at preſent, are abſolutely dramatic pieces to many actors, which differ from operas only in what the one repreſents on the ſtage, and the other executes in concert, ſo that the cantata is, on a profane ſubject, what the oratorio is on one that is ſacred.

CANTATILLE, Is a diminutive of cantata, and in reality only a very ſhort cantata, whoſe ſubject is united by ſome verſes in recitative, in two or three airs in rondeau for the moſt

part, with ſome accompaniments of ſymphony. The nature of the cantatilla is ſtill more trifling than that of the cantata, in whoſe place it has been ſubſtituted amongſt us. But as we can neither diſcover paſſions or painting therein, and as it is ſuſceptible of gentility only, 'tis a reſource for the inferior verſe ſcribblers, and for muſicians without genius.

CANTIC, A hymn ſung in honour of the divinity. The firſt and moſt ancient cantics were compoſed on account of ſome memorable event, and may well be reckoned as the moſt ancient hiſtorical monuments.

Theſe cantics were ſung by choirs of muſicians, and often accompanied with dances, as it appears by writings. The moſt diſtinguiſhed piece that we meet with of this nature, is the cantic of cantics; a work attributed to Solomon, and which ſome authors pretend to be his epithalamium only, on his marriage with the daughter of the king of Ægypt. But the Theologicians diſcover under this emblem, the union of Jeſus Chriſt and the Church. The Sieur de Cahuſac ſaw, in this cantic of cantics, nothing more than a well compoſed opera, the ſcenes, the dialogue, the duo, the choirs, were intirely perfect; nothing was wanting, and he made no doubt but that the opera had been repreſented.

I do not know any of the pieces of muſic in the Roman church, which have yet retained the name of cantic, unleſs it be the cantic of Simeon, that of Zachara, and the Magnificat, ſtiled the cantic of the Virgin. But amongſt us every thing ſung in our temples is called cantic, except the pſalms, which retain their proper name.

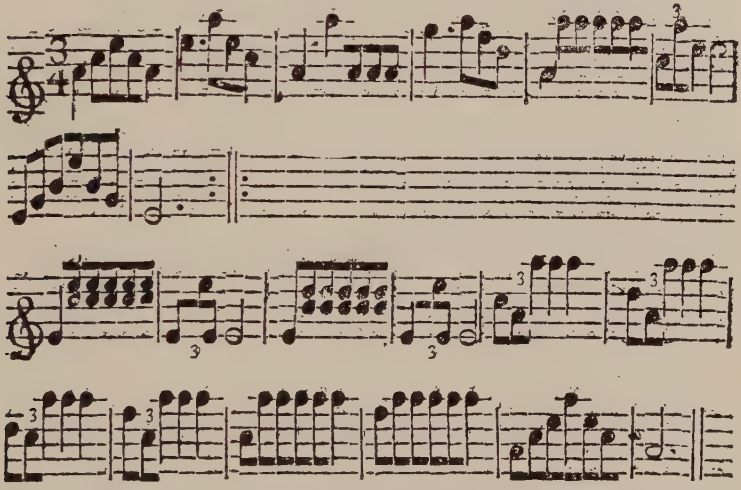
The Greeks gave the name of cantics alſo to ſeveral paſſionate ſoliloquies of their tragedies, which we ſung in the hypo-dorian or hyphrygian ſtile, as Ariſtotle teaches us in his nineteenth problem.

CANTO, This Italian word, written in a partition, on the ſcale fixed for the firſt violin, ſhews that it ſhould play in uniſon on the ſinging part.

CAPRICIO, A kind of irregular piece of muſic, in the which the author, without confining himſelf to any ſubject, gives ſcope to his genius, and indulges the whole fire of compoſition. The capricio of Rebel was eſteemed in its day. At preſent the capricios of Locatelli are become the exerciſe of our violins.

CARRILLON, A kind of air made to be performed by a number of bells, tuned in a different harmony. As the carrillon is rather made for the bells than the bells for the carrillon, there are no more ſounds permitted therein than there are bells. We muſt moreover obſerve, that all their ſounds, having ſome duration, each one of thoſe which are ſtruck ſhould form a harmony

mony with that which precedes it, and that which follows; a ſubjection which, in a lively movement, ought to extend itſelf through a whole meaſure, and even farther, ſo that the ſounds which continue together may make no diſſonance to the ear. There are ſeveral other obſervations to be made for the compoſition of a good carrillon, which renders this work more laborious than ſatisfactory, for the muſic of bells is filly at the beſt, tho' all their ſounds be exactly true, which never happens.

*A Conſonant Carrillon of Nine Bells.*

We may here ſee the example of a conſonant carillon, compoſed to be executed on a pendulum of nine bells, formed by Monſ. Romilly, a celebrated clock-maker. It is generally imagined, that the exceeding difficulties to which the harmonic ſucceſſion of ſounds, and the ſmall number of bells are ſubject, will not permit any thing vocal in an air of this nature.

CARTELS, Large ſheets of aſſes-ſkin prepared for the purpoſe, on which are drawn the lines of the ſcale, for the benefit of marking thereon every thing neceſſary for compoſition, and rubbing it out at pleaſure with a ſponge: The other ſide, which has no ſcale, may ſerve for ſcribbling, and is rubbed out in the ſame manner, provided that the ink is not left to dry. With a cartel, a diligent compoſer may be ſupplied for ever, and ſpare many quires of ruled paper; but there is this inconvenience, that the pen paſſing continually on the engraved lines, eaſily wears out and ſoftens. All the cartels take their riſe from Rome or Naples.

CASTRATO, A muſician, who in his infancy had been deprived of the organs of generation, for the ſake of preſerving a ſhrill voice, who ſings that part called ſopbrano. However ſmall the connection may appear between two ſuch different organs, it is a certain fact that the mutilation of the one prevents and hinders in the other that change which is perceptible in mankind, near the advance of manhood, and which, on a ſudden, lowers their voice an eighth. There exiſt in Italy, ſome inhuman fathers, who ſacrificing nature to fortune, give up their children to this operation, for the amuſement of voluptuous and cruel perſons, who have the barbarity to require the exertion of voice which the unhappy wretches poſſeſs. Let us leave to the modeſt ladies of great cities, the ſtifled laughs, the diſdainful air, and the jocular ſneers, whoſe external object they are; but let us explain, if we are able, the voice of modeſty and of humanity, which vociferates loudly againſt this horrid cuſtom; and let thoſe princes, who encourage it by their endeavours, bluſh for once, at the thought of injuring, in ſo many reſpects, the preſervation of the human race!

In the next place, the advantage of voice in theſe caſtrati is amply recompenſed by many other loſſes.---Theſe men, who ſing ſo well, but without fire or paſſion, become on the ſtage the moſt miſerable actors in the world: They love their voice at an early period, and gain, in return, an affectation very diſguſting. They ſpeak and pronounce worſe than *men themſelves*, and there are alſo ſeveral letters, ſuch as the *r*, which they cannot pronounce at all.

Though the word caſtrato cannot offend the moſt delicate ear, 'tis not the ſame thing in regard to its French ſynonymy. An evident proof, that what renders words indecent or immoeſt, depends leſs from the ideas attached to them, than from the practice of genteel company, in regard to their toleration or abolition of them.

CATABAUCALESIO, A nurſe's humdrum ditty amongſt the ancients.

CATACOUSTIC, A ſcience whoſe chief objects conſiſt in reflected ſounds, or that part of the acouſtic which conſiders the propriety of the eccho. For which reaſon the catacouſtic is to the acouſtic what the catoptric is to the optic.

CAVATINA, A kind of air, in general rather ſhort, which neither has a return nor ſecond part, and which is often found in confined recitatives. This ſudden change from recitative to a meaſured harmony, and the unexpected return of the meaſured harmony to the recitative, produce an admirable effect in ſublime expreſſions, as are always thoſe of the confined recitative.

The

The word cavatina is Italian, and tho' I wiſh not in this dictionary all the technical Italian words, particularly when theſe words are ſynonymous to another language, yet I think myſelf obliged to explain *thoſe* of ſuch words which are employed in the marked muſic; becauſe, that in executing this muſic, it is neceſſary to underſtand the terms which are therein, and which the author has not placed without a reaſon.

CENTONIZARE, A term in church-muſic. 'Tis to compoſe an air with backward lines, properly arranged for the melody in queſtion. This method of compoſition is not the invention of the modern ſymphoniſts, ſince, according to Monſ. L'Abbé de Bœuf, Saint Gregory himſelf was converſant in the art.

CHACON, A kind of muſical piece formed for the dance, the meaſure of which is well marked, and the movement moderate. Formerly there were chacons of two and three times, but at preſent they compoſe them only of three. They are in general airs, which are called couplets, compoſed and varied in different manners on a conſtrained baſs, from four to four meaſures, beginning almoſt always by the ſecond time to prevent an interruption. We have by degrees aboliſhed this conſtraint of the baſs, and pay little or no attention to it.

The beauty of the chacon conſiſts in finding notes which expreſs the movement well, and, as it is often very long, in varying the couplets in ſuch a manner that they may make a mutual contraſt, and continually enliven the attention of the hearer. For this purpoſe we paſs and repaſs at pleaſure from the major to the minor, without quitting, however greatly, the principal tone; and from the grave to the gay, or from the tender to the lively, without ever exceeding or leſſening the meaſure.

The chacon was firſt introduced in Italy, and formerly in great eſteem there, as well as in Spain. But at preſent it is no longer known, except in the French operas.

AMBROSIAN CHANT, A kind of church-muſic, the invention of which is attributed to St. Ambroſe, archbiſhop of Milan. (Vide CHURCH-MUSIC.)

GREGORIAN CHANT, A kind of church-muſic, the invention of which has been attributed to Pope St. Gregory, and which has been ſubſtituted or preferred in moſt churches to the ambroſian chant. (Vide CHURCH-MUSIC.)

CHANT en ISON, By this name is called an air, or pſalmody, which varies only in two ſounds, and conſequently forms one interval only. Some religious orders have no other chant, in their churches than the Chant en Iſon.

CHANT

CHANT SUR LE LIVRE, A kind of plain chant, or counterpoint in four parts, which the muſicians compoſe and ſing extempore on one only, i. e. the book of choruſſes at the Lutrin, ſo that, except the pricked part, which is generally put on the tenor, the muſicians being attentive to the three other parts, have that only for their guide, and each compoſes his ſeparate part whilſt ſinging.

The Chant ſur le Livre requires great knowledge, practice, and a fine ear in thoſe who execute it, ſo much the more, as it is not always eaſy to render the tones of the church-muſic ſimilar to thoſe of ours. However, there are ſome church-muſicians, ſo well verſed in this kind of ſinging, that they can begin and even go through the fugues whenever the ſubject can permit, without confounding or cruſhing the parts, or making any errors in the harmony.

CHANTEREL, That of the ſtrings of the violin, and ſimilar inſtruments, whoſe ſound is ſharpeſt. We ſay of a ſymphony, that it does not quit the chanterel, when it actuates only between the ſounds of that ſtring, and thoſe which are neareſt to it, as are almoſt all the violin parts of Lully's operas, and of the ſymphonies of his time.

CHAPEAU, or TIE, A demi circular ſtroke, with which two or more notes are covered, and which is more commonly called Liaiſon.

CHARACTERS of MUSIC, Are the different ſigns which are uſed to repreſent all the ſounds of melody, and all the powers of the times and meaſure, ſo that by the aſſiſtance of thoſe characters one may read and execute muſic exactly as it has been compoſed, and this method of writing is called pricking. (Vide NOTES.)

There are no nations but the European, who underſtand the art of writing their muſic. Tho' in the other parts of the world every people has its own; it does not appear that any of them have extended their reſearches ſo far as the formation of characters to denote it. At leaſt, it is certain that neither the Arabians or Chineſe, the two foreign people who have moſt cultivated the arts, have any ſuch ſimilar characters. It muſt be confeſſed, that the Perſians give the names of their citus, or parts of the human body to the forty-eight ſounds of their muſic. They ſay, for inſtance, to give the tone of any air, "Go from ſuch to ſuch a city," or "Go from the finger to the elbow;" but they have no ſign proper for expreſſing theſe ſame ſounds on paper; and in regard to the Chineſe, we find in P. du Halde, that they were extremely ſurpriſed to ſee the Jeſuits mark and read on the ſame note, all the Chineſe airs, with which they made them acquainted.

The

The ancient Greeks in their muſic, as in their arithmetic, made uſe of the letters of their alphabet, but inſtead of giving them in muſic a numerous power, which might mark the intervals, they were contented with uſing them as ſigns, combining them in different ways, clipping them, coupling, rendering them ſilent, and changing them differently, according to their kinds and modes, as we may ſee in the miſcellany of Alypius.----The Latins imitated them in making uſe of the letters of the alphabet, by their example, and there ſtill remains amongſt us the letter joined to the name of every note of our diatonic and natural ſcale.

Guy Aretin invented the lines, and particular ſigns, which have remained to us under the name of notes, and which are at preſent the muſical and univerſal language of all Europe. As theſe laſt ſigns, though unanimouſly admitted, and perfectionated ſince the time of Aretin, have yet ſome great faults; many have endeavoured to ſubſtitute other notes in their place: Of this number have been Parran, Souhaitti, Sauveur, Dumas, and myſelf. But as, at bottom, all theſe ſyſtems, in correcting old faults to which we were accuſtomed, only ſubſtituted others, which cuſtom is *yet* to make familiar to us; I think that the public acted very wiſely in leaving things as they were, and ſending us and our ſyſtems back into the country of vain ſpeculations.

CHORISTER, Thoſe who ſing in the choir of Catholic churches are called choriſters. We do not ſay ſinger in a church, or choriſter in a concert.

Among the reformed, they call choriſter, him who gives the tone and ſuſtains the air of the pſalms in their temple: He is ſeated below the miniſter's choir forwards; his office requires a very ſtrong voice, capable of exceeding that of the congregation, and of making himſelf heard to the very extremity of the temple. Though there be neither proſody nor meaſure in the French method of ſinging pſalms, and tho' the tune is ſo ſlow that every one may eaſily follow it, yet, it ſeems to me that it muſt be neceſſary for the choriſter to mark a kind of meaſure. The reaſon of it is, that the choriſter being very diſtant from ſeveral parts of the church, and the ſound paſſing ſlowly thro' the greater intervals, his voice can hardly be heard at the extremities till it has taken another tone, and began a different note, which becomes ſo much the more ſenſible in certain places, as the ſound paſſing ſtill more ſlowly from one extremity to the other, than from the middle, where the choriſter is, the maſs of air which fills the temple becomes at once divided into ſeveral very diſcordant ſounds, which inceſſantly preſs one on the other,

and

and diſguſt greatly a nice ear; a fault that the organ itſelf only increaſes, becauſe inſtead of being in the middle of the edifice, as the chorifter, it gives the tone only from one end.

The remedy of ſuch an inconvenience appears to me exceedingly ſimple; for as the viſual rays are inſtantly communicated from the object to the eye, or at leaſt, with a velocity much greater than that with which the ſound is tranſmitted from a ſonorous body to the ear, it is ſufficient to ſubſtitute one for the other, to have in the whole compaſs of the temple, a tune well ſuſtained, and of a perfect concord. For this purpoſe, we have nothing to do but to place the choriſter, or ſome one who diſcharges that part of his office, ſo that he may be in view of the whole congregation, and let him make uſe of a time-ſtick, the motion of which may be eaſily perceived at a diſtance, for inſtance, a roll of paper; for then, with the precaution of giving a ſufficient duration to the firſt note, that the intonation of it may be extended on all ſides before it's followed; all the reſt of the tune will proceed perfectly well together, and the diſcord which I mentioned, muſt infallibly diſappear. We might even, inſtead of a man, make uſe of a chronometre, the motion of which would be ſtill more equal in ſo ſlow a meaſure.

From thence would reſult two other advantages alſo; one, that almoſt without changing the air of the pſalms, it would be eaſy to introduce therein a little proſody, and at leaſt to obſerve the moſt ſenſible long and ſhort; the other, that whatever languor and monotony there might be in the tune, might, according to the firſt intention of the author, be extirpated by the baſs and other parts, whoſe harmony is certainly the moſt majeſtic and ſonorous that can be heard.

CHORUS, A piece of muſic, complete in four or more parts, ſung at the ſame time by all the voices, and played by the whole band. In choruſſes we ſeek for an agreeable and harmonious melody, which may charm and ſatisfy the ear. A pleaſing chorus is the maſter-piece of a beginner, and 'tis by a work this kind that he ſhews himſelf ſufficiently inſtructed in all rules of harmony. The French, in France, paſs for the moſt excellent in that particular branch, of any European nation. The chorus, in the French muſic, is ſometimes called grand-chœur, in oppoſition to the petit-chœur, which is compoſed of three parts only, that is to ſay, two trebles and the tenor, which ſerves as their baſs. This petit-chœur is now and then played ſeparately, the ſweetneſs of which makes an agreeable contraſt to the loud harmony of the greater.

They give the name of petit-chœur alſo, in the opera of Paris, to a certain number of the beſt inſtruments in every kind, which as a particular orcheſtra are placed next to the harpſichord, and him

him who beats the time. This petit-chœur is deſtined for the accompaniments, which requires a greater delicacy and preciſion.

There are ſome pieces of muſic of two or more choruſſes, which anſwer each other, and ſometimes are all ſung together. We may find an example of this in the opera of Jephtha. But this plurality of choruſſes, which is very often practiſed in Italy, is ſeldom uſed in France. They find that it does not produce a very pleaſing effect, that its compoſition is not very eaſy, and that too great a number of muſicians are wanted for the execution of it.

CHORION, A piece of Greek muſic, which was ſung in honour of the mother of the gods, and which is ſaid to have been invented by Olympus of Phrygia.

CHRESES or CHRESIS, One of the parts of the ancient melopea, which teaches the compoſer to place ſuch an arrangement in the diatonic direction of ſounds, as to form from them a good modulation and an agreeable melody. This part is applicable to different ſucceſſions of ſounds, called, by the ancients, agoge, euthia, anacamptos.

CHROMATIC, A kind of muſic which proceeds in ſeveral conſecutive ſemi-tones. This word is derived from the Greek χρῶμα, which ſignifies colour, either becauſe the Greeks marked theſe notes with red characters, or differently coloured; or, according to authors, becauſe the chromatic kind is a medium between the two others, as colour is between black and white; or according to others, becauſe this kind varies and embelliſhes the diatonic by its ſemi-tones, which, in muſic, produces the ſame effect as the colours in painting.

Boetius attributes the invention of this chromatic muſic to Timotheus of Milet; but Athenæus to Epigonus.

Ariſtoxenes divides this kind into three ſorts, which he calls molle, hemiolion, and tonicum; the connections of which we may here find, the tetrachord being ſuppoſed to be divided in 60 equal parts.

According to Ariſtoxenes.

Diatonic.

The tender or ſoft 12+18+30=60
Syntonic or hard 12+24+24=60

Chromatic.

Molle 8+ 8+44=60
Hemiolon 9+ 9+42=60
Tonic 12+12+35=60

Harmonic.

6+6+48=60

Ptolomæus divides this ſame kind into two ſorts only, molle, or anticum, which proceeds by leſſer intervals; and intenſum, the intervals of which are greater.

According to Ptolomæus.

Diatonic.

$$\text{Diatonic } \frac{256}{243} + \frac{9}{8} + \frac{9}{8} = \frac{4}{3}$$

Chromatic.

$$\text{Molle } \frac{28}{27} + \frac{15}{14} + \frac{6}{5} = \frac{4}{3}$$

$$\text{Intenſe or Syntonic } \frac{22}{21} + \frac{12}{11} + \frac{7}{6} = \frac{4}{3}$$

Harmonic.

$$\frac{45}{45} + \frac{24}{23} + \frac{5}{4} = \frac{4}{3}$$

At preſent the chromatic kind conſiſts in giving ſuch a courſe to the fundamental baſs, that the parts of the harmony, or at leaſt ſome one of them, may proceed by ſemi-tones, as much in aſcending as deſcending, which is moſt frequently found in the minor mode, on account of the alterations to which the 6th and 7th notes are ſubject, by the very nature of the mode.

The ſucceſſive ſemi-tones practiſed in the chromatic, are not all of the ſame kind, but almoſt alternately minors and majors; that is to ſay, chromatics and diatonics: for the interval of a minor tone contains a ſemitone minor or chromatic, and a ſemitone major or diatonic, a meaſure which its government makes common to all the tones; ſo that we cannot proceed by two conjoint and ſucceſſive ſemi-tones minor, without entering on the harmonic; but two major ſemi-tones follow each other twice in the chromatic order of the gamut.

The elementary route of the fundamental baſs, to produce an aſcendant chromatic, is to deſcend from the third, and aſcend to the fourth alternately, all the concords ſuſtaining the major third. If the fundamental baſs proceeds from dominant to dominant, by perfect cadences avoided, it produces a deſcendant chromatic. To produce at the ſame time the one and the other, we intermix the perfect cadence, and the interruption by avoiding them.

As in every note the tone is changed in the chromatic, we muſt ſet bounds and regulate theſe ſucceſſions for fear of loſing ourſelves; and for this purpoſe, it muſt be remembered, that the ſpace which is moſt ſuitable for the chromatic movements, is between the dominant and tonic in aſcending, and between the to-

nic and dominant in deſcending. In the major mode we may alſo deſcend chromatically from the dominant on the ſecond note. This paſſage is very common in Italy, and, tho' beautiful, is rather too much ſo in France.

This chromatic is admirable for expreſſing ſorrow and affliction, its forcible ſounds in riſing ſtrike the ſoul. It is not leſs energic in deſcending: We ſeem then even to hear the identical groans. When accompanied by its harmony, this kind becomes proper for every thing; but its fulneſs, by ſtifling the air, takes away a part of its expreſſion, and 'tis then the office of the movement to reſtore to it *that* which it is deprived of by the plenitude of its harmony. Moreover, the greater energy this kind poſſeſſes, the leſs ſhould it be augmented: Like thoſe delicate diſhes whoſe abundances ſoon diſguſt, ſo it charms when prudently conducted, ſo it becomes ſatiated when overdone.

CHRONOMETRE, The general name of inſtruments which ſerve to meaſure the time. This word is compoſed of χρόνος, time, and μέτρον, meaſure.

In this ſenſe we call watches or clocks by the name of chronometres. There are however ſome inſtruments which are particularly called chronometres, and one in chief which Monſ. Sauveur deſcribes in his principles of the acouſtic. This was a particular pendulum, which he intended to determine exactly the movements of muſic. L'Affilard, in his principles dedicated to a convent of nuns, placed at the head of all his airs, cyphers, which expreſſed the number of the vibrations of this pendulum, during the continuation of each meaſure.

About thirty years ago there appeared a plan of a ſimilar inſtrument under the name of Metrometre, which beat time alone, but it neither ſucceeded in one or the other. Many pretend, however, that it were much to be wiſhed, that ſuch an inſtrument might be had, to fix with preciſion the time of each meaſure in a piece of muſic: by this means we might eaſily preſerve the true movement of the airs, without which they loſe their value; and which one cannot know after the death of the authors, but, by a kind of tradition, very ſubject to change or obſcurity. It is already a complaint, that we have forgot the movements of a great number of airs, and it is to be believed, that all have undergone a change. If they had had the precaution which I have mentioned, and in which I ſee nothing inconvenient, we ſhould at preſent have had the pleaſure of hearing thoſe ſame airs, ſuch as the author intended them to be executed.

To this the connoiſſeurs in muſic do not remain without an anſwer: They will object, ſays Monſ. Diderot, in his Memoirs on different Subjects of the Mathematics, againſt all chronome-

tres in general, that there is not, perhaps, in an air two measures which are exactly of the same duration: two things contributing thro' neceſſity, to ſlacken the one and haſten the other, taſte and harmony in pieces of many parts, taſte and a preſentiment of the harmony in the ſolo. A muſician who underſtands his art, has not played four meaſures of an air but he enters into the character of it, and is intirely wrapt up in it: The pleaſure of the harmony only ſuſpends him. He wiſhes the concords to be ſtruck *here* and *there*, that they ſhould be omitted, that is to ſay, that he ſhould ſing or play more or leſs ſlowly, from one meaſure to another, and even from a time or quarter time, to him who follows.

In fact, this objection, which is of great weight in the French muſic, is of no kind of conſequence in the Italian, it being moſt ſtrictly confined to the moſt exact meaſure: Nothing even can more plainly ſhew the oppoſition of theſe two muſics; ſince, what is a beauty in the one, would be a capital fault in the other. If the Italian muſic draws its energy from that ſlavery to the rigour of the meaſure, the French ſeeks her's by modulating this ſame meaſure at her pleaſure; by augmenting or diminiſhing it, according to what the nature of the air requires, or the degree of flexibility in the voice of the ſinger.

But ſhould we admit the utility of a chronometre, we muſt always, ſays Monſ. Diderot, begin by rejecting all thoſe which we have propoſed to follow, becauſe we form, from the muſician and the chronometre, two ſeparate machines, the one of which can never be aptly ſubject to the other: This hardly can require a proof. It is impoſſible that the muſician can have, throughout the whole of his piece, his eye on the movement, and his ear attentive to the ſound of the pendulum; and if he is loſt but one moment, loſt is the rein alſo which they have pretended to have given him.

I will add, that whatever inſtrument may be found to regulate the duration of the meaſure, it muſt be impoſſible, tho' the execution ſhould be of never ſo great facility, that it can ever have a place in practice. The muſicians confident, and, like many others, forming the rules of a good taſte from their own, would never adopt it. They would leave the chronometre, and would apply to themſelves only the true character and true movement of the airs. For which reaſon, the only good chronometre we can have, is an ingenious mutician, who has taſte, who has well read the muſic he is to execute, and who is ſkilled in beating its time. Amongſt the variety of machines, this certainly is the ſafeſt to confide in.

CHURCH MUSIC, or PLAIN CHANT, Was a name given in the Roman church to the eccleſiaſtic airs. This chant, juſt

juſt as it remains to this time, is an antiquity very much diſfigured, but very precious, of the Greek muſic, which after having paſſed thro' the hands of barbarians, has not, however, been able to loſe all its primitive beauties. There remains yet enough of it to render it much preferable, even in its preſent condition, and for the uſe to which it is intended to thoſe effeminate and theatrical pieces, which in ſome churches are ſubſtituted in its place, without gravity, without taſte, without agreement, and without reſpect for the place which they dare thus to profane.

The time when the chriſtians began to have churches, and to ſing pſalms and hymns therein, was that wherein muſic had already loſt all its ancient energy, by a progreſs, the cauſes of which I have mentioned elſewhere. The chriſtians entering upon muſic in the condition which they found it in, took from it even the greateſt ſtrength that had remained to it, that is to ſay, that of the rhyme and metre; when, inſtead of the verſes, to which it had been always applied, they changed it into the proſe of their ſacred writings, or ſome ſtrange kind of barbarous poetry, worſe for muſic than the proſe itſelf. In that caſe, one of the two conſecutive parts vaniſhes, and the air extending itſelf uniformly, and without any kind of meaſure, from notes to notes almoſt equal, loſes, with its rhymic and cadenced form, all the energy which it received from it. There were but a few hymns, in the which the proſody and quantity of feet being preſerved, we ſtill felt, in a leſſer degree, the cadence of the verſe, but it was no longer the general characters of the plain-chant, moſt generally degenerated in a pſalmody, always monotonous, and ſometimes ſilly, in a language ſuch as the latin, much leſs harmonious and accented than the Greek.

In ſpite of all theſe ſo great and ſo eſſential loſſes, the plain-chant preſerved elſewhere by the prieſts in its primitive character, as well as all the exterior and ceremonious parts of their church, ſtill preſents ſome precious fragments of the ancient melody, and its different modes to connoiſſeurs, as much as it can make itſelf felt without meaſure, and without rhyme, and in the only diatonic kind, which we can attribute in its purity to the plain-chant. The different modes therein preſerve their two principal diſtinctions; the one thro' the difference of the fundamentals or the tonics, and the other by the different poſition of the two ſemi-tones, according to the degree of the diatonic natural ſyſtem, wherein the fundamental is found, and according to what the modo authentico, or plagal, repreſents the two tetrachords, conjoint or diſjoint. (Vide SYSTEMS, TETRACHORDS, TONES of the CHURCH.

Theſe modes, ſuch as they have been tranſmitted to us in the ancient eccleſiaſtic chant, preſerve therein a beauty of character, and

and a variety of affections, very ſenſible to an impartial connoiſſeur, and which have preſerved ſome judgment of the ear for the melodious ſyſtems, eſtabliſhed on principles different from ours: but we may well ſay, that there is nothing more ridiculous and more flat, than theſe plain-chants ſuited to our modern muſic, embelliſhed with the ornaments of our melody, and modulated on the chords of our modes; as if our harmonic ſyſtem could at any time be united to that of the ancient modes, which is eſtabliſhed on principles exactly oppoſite. We ought to thank the biſhops, prevoſts, and choriſters, who have oppoſed this barbarous mixture, and uſe our utmoſt endeavours for the progreſs and perfection of an art, which is very far from the point at which it has been placed, that theſe valuable remains of antiquity may be faithfully tranſmitted to thoſe who have ſufficient talents and authority to enrich the modern ſyſtem by the addition of them. How far ſoever our muſic may have been extended into that of the church, I am perſuaded that it would be preferable to convey the church muſic into ours; but for that, much taſte is neceſſary, ſtill *more* knowledge, and above all, an exemption from every kind of prejudice.

The church muſic is pricked on four lines only, and there are but two cleffs uſed in it, i. e. that of ut, and the cleff of fa; one tranſpoſition only, that is to ſay, a B flat, and but two repreſentations of notes, which are the long or ſharp, to which is ſometimes added, a tail, and the ſhort which is formed as a lozenge.

Ambroſius, archbiſhop of Milan, is ſaid to have been the inventor of the plain-chant; that is to ſay, that he was the firſt who gave a form and rules to the eccleſiaſtic chant, to ſuit it better to its object, and to defend it from the barbarity and obſcurity into which muſic was fallen in his time. Pope Gregory perfected it, and gave it the form which it preſerves at preſent in Rome, and the other churches, in which the Roman melody is practiſed. The French church allows the Gregorian chant but in part, with much ill-will and almoſt thro' neceſſity. The following extract from a work about that time, printed at Francfort in 1594, contains the account of an ancient quarrel on account of the plain chant, which was renewed in our days on muſic, but which had not, God and king Charlemagne be praiſed, the ſame iſſue.

"The pious king Charles being returned to celebrate the "feſtival of Eaſter with our apoſtolic lord at Rome, there "aroſe, during the feaſt, a quarrel between the French and "Italian choriſters. The French pretended to ſing better and "more agreeably than the Italians. The latter declaring themſelves ſuperior in the eccleſiaſtic muſic, which they had learned from

" from Pope St. Gregory, accuſed the French of corrupting and " disfiguring the true melody. This diſpute being laid before " his majeſty, the French, who relied greatly on his partiality, " inſulted the Italian ſingers. *They*, proud of their ſuperior " knowledge, and comparing the learning of St. Gregory to " the ruſticity of the others, treated them as clowns, fools, and " ſilly pretenders. As this altercation ſtill continued, the pi- " ous monarch ſaid to his choriſters, Tell us, which is the pureſt " and moſt excellent water, that drawn from the fountain head, " or that of the ſtreams which flow at an extenſive diſtance " from it. All conſented in pronouncing that of the fountain " head the moſt pure, and that of the rivulets ſo much inferior " as the diſtance whence it flowed. Have recourſe then, re- " plied Charles, to the fountain of St. Gregory, whoſe muſic " you have undoubtedly corrupted. The king then deſired of Pope " Adrian ſome choriſters to correct the French chant, and his " holineſs gave him Theodorus and Benoit, two very ingenious " ſingers, and inſtructed by St. Gregory himſelf; he gave him " alſo ſome Antiphonaries of St. Gregory, which he had himſelf " ſet down in Italian Notes. Of theſe two choriſters, the king, " on his return into France, ſent one to Metz, and the other " to Soiſſons, giving all the muſic-maſters in the cities of France " orders to give them their Antiphonaries to correct, and learn " from them to ſing. Thus were the French Antiphonaries " corrected, which every one had changed by additions and re- " trenchments after his fancy; and all the choriſters of France " learned the Roman chant, tho' they have now given it the " name of French: but in regard to the trembling, broken, and " clipp'd notes in this kind of muſic, the French could never " render them, making rather an uncouth noiſe than a trill, on " account of the natural and barbarous roughneſs of their " throats. As for the remainder, the principal ſchool was al- " ways kept at Metz; and as much as the Roman chant ſur- " paſſes that of Metz, ſo much that of Metz excells the other " ſchools of France. The Roman choriſters taught the French " alſo the accompaniment of inſtruments; and the king, having " at the ſame time taken with him into France grammarians " and arithmeticians, ordered that the ſtudy of letters ſhould " be eſtabliſhed throughout; for before this ſaid king Charles, " the knowledge of the liberal arts was intirely unknown in " France."

CIRCUMVOLUTION, A term in church-muſic. 'Tis a kind of perieleſis, which is made by inſerting between the penultimate and the laſt note of the intonation of a piece of muſic, three other notes, viz. one above and two below the laſt note, which three are united with it, and form the compaſs of a third

third before meeting with it, as if you were to have theſe three notes, mi, fa, mi, to terminate the intonation, you would intermix theſe other three, fa, re, re, and in that caſe your intonation muſt be finiſhed in this manner, mi, fa, fa, re, re, mi, &c.

CITHARISTIC, A kind of muſic and of poetry appropriated to the accompaniment of the harp. This kind, of which Amphion, ſon of Jupiter and Antiope, was the inventor, has ſince taken the name of lyric.

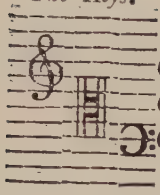
CLEFF, A character of muſic, which is placed at the beginning of a ſtave to determine the degree of elevation of that ſtave in the general key, and to expreſs the names of all the notes which it contains within the line of that cleff.

Formerly the name of cleff was given to the letter, by which the ſigns of the gamut were denoted. Thus the letter A was the cleff of the note la; C the cleff of ut; E the cleff of mi, &c. In proportion as the ſyſtem was extended, they found the difficulty and the inutility of this quantity of cleffs. Gui d'Arrezzo, who had invented them, marked a letter of cleff at the beginning of each line of the ſcale, for he had not yet placed the notes within the ſpaces. In ſome little time, they marked only one of the ſeven cleffs at the beginning of one line only, that being ſufficient to fix the poſition of all the reſt, according to their natural order. At laſt, from theſe ſeven lines or cleffs, four were choſen, which they called claves ſignatæ, becauſe they were ſatisfied with marking one on one of theſe lines to give the idea of all the others; in time, one of the four was removed; that is, the gamma which they made uſe of to denote the ſol below, viz. the hypoproſlambanomenos added to the ſyſtem of the Greeks.

Kitcher effectually pretends that if we were acquainted with the ancient writings, and were to examine the figure of our cleffs, we ſhould find, that each one has a connection with the letter a little varied of the note which it repreſents. For inſtance, the cleff of ſol was originally a G; the cleff of ut a C; and that of fa an F.

We find then in the fifth, three cleffs, one after the other. The cleff of F, ut, fa, or of fa, which is the loweſt; the cleff of ut, or of C, ſol, ut, which is a fifth above the firſt; and the cleff of ſol, or of G, re, ſol, which is a fifth above that of ut, in the order marked as follows.

*The Keys.*



Cleff of ſol, or of G, re, ſol.
Cleff of ut, or of C, ſol, ut.
Cleff of fa, or of F, ut, fa.

In regard to which we ſhould remark, that by a remain of ancient cuſtom, the cleff is always plac'd on one line, and never in the ſpace. We ſhould know alſo that the cleff of fa is made in three different manners; the one in printed muſic, another in the written or engraved, and the laſt in church-muſic.

*The three different repreſentations of the Cleff Fa.*

*Printed Muſic.*

*Written Muſic.*

*Church-Muſic.*

By adding four lines above the cleff of ſol, and three below the cleff of fa, which gives, on each ſide, the greateſt extent of ſtable lines, we may ſee, that the whole ſyſtem of notes which can be placed on the relative degrees of theſe cleffs, amounts to 24; that is to ſay, 3 eighths and a fourth from the fa, which is placed below the firſt line to the ſi, which is found above the laſt, and all this together forms, what is called, the general key; by which we may judge, that this extent has for ſome time made that of the ſyſtem. At preſent, whilſt new degrees are inceſſantly forming, as well in ſharp as flat, thoſe degrees are marked on lines added on the top or bottom, juſt as required.

Inſtead of joining together all the lines as I have done, to expreſs the connection of the cleffs, they are ſeparated into fives,

becauſe the extent of the voice in general is bounded nearly by the degrees contained within that ſpace. This collection of five lines is called ſtave, and a cleff is there placed to determine the name of the notes, the place of the ſemitones, and to ſhew what part the ſtave requires within the key.

By whatſoever method we take five conſecutive lines, within the gamut we always find a cleff compriſed therein, and ſometimes two, in which caſe we cut off one as uſeleſs. Cuſtom has even preſcribed which of the two ſhould be effaced, and which ſhould ſtand, which has alſo fixed the number of poſitions aſſigned to each cleff.

If I make a ſtave of the five firſt lines of the gamut, beginning at the bottom, I find the cleff of fa on the fourth line. Here then is the poſition of a cleff, and that poſition evidently belongs to the flatteſt notes. In like manner is it the poſition of the baſs cleff.

If I wiſh to have a third at the top, I muſt add a line above, but in that caſe I muſt eraſe one below, otherwiſe the ſtave would conſiſt of more than five lines. The cleff of fa is then removed from the fourth to the third line, and the cleff of ut alſo on the fifth; but as two cleffs are uſeleſs, that of ut is here rejected. We ſee that the ſtave of this cleff is elevated a third more than the preceding.

By loſing alſo a line below to gain one above, we have a third ſtave, wherein the cleff of fa muſt be placed on the ſecond line, and that of ut on the fourth: here we loſe the cleff of fa, and take that of ut. We have gained alſo a third in ſharp, and loſt it in flat.

By continuing thus from line to line, we paſs ſucceſſively through four different poſitions of the cleff of ut. Coming to that of ſol, we find it placed on the ſecond line, and again on the firſt: This poſition extends itſelf to the five higheſt lines, and gives the ſharpeſt diapaſon, that can be eſtabliſhed by the cleffs.

We may ſee this ſucceſſion of cleffs from flat to ſharp, which makes in all eight ſtaves, cleffs, or different poſitions of cleffs.

Whatever may be the character of a voice or inſtrument, provided that its extent does not exceed in ſharp or flat, that of the general gamut, we may in this number find a ſtave and cleffs ſuitable to it; and there are in reality ſome determined for all the parts of muſic. (Vide PARTS) If the extent of a part is very great, ſo that the number of lines, which muſt be added above or below, becomes inconvenient, in that caſe, the cleff is changed within the courſe of the air. We evidently ſee by the figure, what cleff we muſt take to elevate or lower the ſtave, whatever

whatever may be the key with which it is actually numbered.

We alſo ſee, that to connect one cleff with another, we muſt connect them both on the general ſcale; by the method of which, we ſee what each note of one of the cleffs is in proportion to the other. 'Tis by this reiterated exerciſe, that we learn the art of eaſily reading the partitions. From this mechaniſm it follows, that we may place whatever note of the gamut we pleaſe on any line or ſpace of the ſtave; ſince we have the choice of eight different poſitions, the number of the notes of the octave. In this manner, we might prick an entire air on the ſame line, by changing the cleff in every degree. The figure ſeven, ſhews, through the courſe of cleffs, the courſe of the notes re, fa, la, ut, mi, ſol, ſi, re, aſcending from third to third, and all placed on the ſame line.

The following figure 8 repreſents in the courſe of thoſe ſame cleffs, the note ut, which ſeems to deſcend by thirds on all the lines of the ſtave, and below; and which, however, by means of the change in the cleff, preſerves always its uniſon. 'Tis on ſimilar examples that we ought to practice, to know at firſt ſight the play of all theſe cleffs.

Here are two of their poſitions; that is to ſay, the cleff of ſol on the firſt line, and the cleff of fa on the third, the uſe of which ſeems daily to aboliſh. The firſt may appear leſs neceſſary, ſince it forms one poſition only quite ſimilar to that of fa on the fourth line, which, however, it is different from by two eighths. As for the cleffs of fa, it is evident, that by removing it entirely from the third line, we ſhall no longer have an equivalent poſition; and the compoſition of the gamut, which is at preſent complete, muſt by that means become defective.

TRANSPOSED CLEFF, By this name we call every cleff, numbered with dieſis's, or B's flat. Theſe ſigns ſerve there to change the place of the two ſemi-tones of the octave, as I have explained under B flat, and to eſtabliſh the natural order of the gamut, on whatever degree of the ſcale we may deſire.

The neceſſity of theſe alterations ariſes from the ſimilitude of modes in all the tones; for as there is but one form for the major mode, all the degrees of this mode muſt be placed in the ſame method on their tonic, which cannot be done but by the aſſiſtance of dieſis's, or of B mollare's. The minor mode is conducted in the ſame manner; but as the ſame combination which gives the form for a major tone, gives it alſo for a minor on another tonic, (Vide Mode) it follows thence, that for the twenty-four modes, twelve combinations are ſufficient; moreover, if with the natural gamut, we count ſix modifications by dieſis, and five by B's flat, or ſix by B's flat, and five by dieſis's,

dieſis's, we ſhall find theſe twelve combinations, by which are bounded, all poſſible varieties of tones and modes in the eſtabliſhed ſyſtem. I explain, under the words dieſis's, or B's flat, the order, according to which they ought to be placed in the cleff. But for tranſpoſing on a ſudden the cleff, ſuitable to any tone or mode ſoever, here is a general form diſcovered by Monſ. Boiſgelou, preſident of the Grand Council, and which he has obligingly communicated to me.

Taking the natural ut, as a term of compariſon, we will call minor intervals the fourth ut fa, and all the intervals of the ſame ut, to any note with B flat; every other interval is major. Take notice that we ought not to take by dieſis, the ſuperior note of a major interval, becauſe in that caſe we ſhould form a ſuperfluous interval; but we muſt attempt the ſame thing by B flat, which will give a minor interval. Wherefore we ſhall not compoſe in the dieſis la, becauſe the ſixth ut la, being naturally major, would become ſuperfluous by this dieſis; but we muſt take the note ſi B flat, which gives the ſame force by a minor interval, which returns into the rule.

## *Table of* INTERVALS.

*For the Formula of* Cleffs *tranſpoſed.*

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Space of the Interval.* | Minor | Major | Minor | Major | Minor | Major | Major | Minor | Major | Minor | Major |
| *The Notes which give it.* | Ut, re♭, | re, | mi♭, | mi, | fa, | fa♯, | fol, | la, | la♭, | ſi♭, | ſi, | ut. |
| *Name of the Interval.* | Second, Term of Compariſon. | Second. | Third. | Third. | Fourth. | Fourth. | Fifth. | Sixth. | Sixth. | Seventh. | Seventh. | |

We here find a table of the twelve ſounds of the octave, divided by major and minor intervals, on the which we may tranſpoſe the cleff in the following manner, according to the tone or mode in which we chuſe to compoſe.

Having taken one of thoſe twelve notes for tonic or fundamental, we muſt immediately ſee if the interval which it makes with ut is major or minor; if 'tis major, dieſis's are neceſſary; if minor, we muſt uſe B's flat. If that note be ut itſelf, the interval is null, and we want neither dieſis's or B's flat. To determine now how many dieſis's or B's flat are wanting, let *a* be the number which expreſſes the interval of ut in the note in queſtion.

The form by dieſis's will be $\frac{a-1+2}{7}$ and the remainder will give

give the number of dieſis's, which we ought to place at the cleff. The formula by B's flat will be $\frac{\bar{a}-1+5}{7}$, and the reſt will be the number of B's flat which we muſt place to the cleff.

I will, for inſtance, compoſe in la a major mode. I immediately ſee that dieſis's are wanting, becauſe la makes a major interval with ut. The interval is a ſixth, whoſe number is 6, I remove 1, I multiply the remaining 5 by 2, and from the product 10 rejecting 7 as often as poſſible, I have the remainder 3, which marks the number of dieſis', with which I muſt number the cleff for the major tone of la.

If I wiſh to take fa, a major mode, I ſee by the table that the interval is minor, and that in conſequence B's flat are neceſſary. I take away then 1, from 4 the number of the interval, I multiply the remaining 3 by 5, and from the product 15, throwing away 7 as often as poſſible, I have 1 remaining, that is a B flat, which I muſt place to the cleff.

We ſee by this means that the number of dieſis's or B's flat can never exceed ſix, ſince they muſt be the remainder of a diviſion by ſeven.

For the minor tones we muſt ſtill uſe the ſame forms as that of the major, not on the tonic, but on the note, which is a minor 3d above this ſame tonic, on its mediant.

So, to compoſe in ſi a minor mode, I will tranſpoſe the cleff as for the major tone of re. For fa, a minor dieſis, I will tranſpoſe it as for la major.

Muſicians determine the tranſpoſition only by force of cuſtom, but the rule which I give is demonſtrated, general, and without exception.

COMARCHIOS, A kind of appellation for the flute in the ancient muſic of the Greeks.

COMMA, A ſmall interval, which in ſome caſes is found between two ſounds, produced under the ſame denomination, by different progreſſions.

We diſtinguiſh three kinds of commas. Firſt, the minor, the computation of which is from 2025 to 2048, which is the quantity by which the ſi dieſis fourth 5th of the ſol dieſis, taken as a major third of mi, is ſurpaſſed by the natural ut which correſponds to it. This comma is the difference of the major and middle ſemitone.

Secondly, The major comma is that which is placed between the mi produced by triple progreſſion, as a fourth fifth, beginning by ut and the ſame mi, or its reſpondent, conſidered as a major third of that ſame ut. Its numerical powers are from 80

to 81. This is the ordinary comma, and it is the difference between the major and minor tone.

Thirdly, The comma maxima, which is called the comma of Pythagoras, has its computation from 524288 to 531441, and it is the excess of the fi dieſis produced by triple progreſſion, as the twelfth fifth of the ut on the ſame ut elevated by its eighth to the correſpondent degree.

The muſicians underſtand by comma the eighth or ninth part of the tone, the half of what they call a quarter of a tone. But we may reſt aſſured that they know not what they ſay, in expreſſing themſelves thus, ſince, for ears like ours, ſo ſmall an interval is uſeleſs, unleſs in calculation. (Vide INTERVAL.)

COMPAIR, The compair tones in church-muſic, are the authentic and the plagal which anſwers to it. So, the firſt tone is compair with the ſecond, the third with the fourth, and ſo on. Every equal tone is compair with the unequal that precedes it.

COMPLEMENT Of an interval, is the quantity which is wanting to it to arrive at the octave, ſo the ſecond and ſeventh, the third and ſixth, the fourth and fifth, are complements one of the other. When we treat of one interval only, complement is the ſame thing with the general variation of notes. In regard to their kinds, the major is complement of the minor, the ſuperfluous of the diminiſhed, and ſo reciprocally. (Vide INTERVAL.)

COMPOS'D, This word has three meanings in muſic; two in regard to the intervals, and one to the meaſure.

I. Every interval which paſſes the extent of the Octave, is a compos'd interval, becauſe by removing the octave, we ſimplify the interval without changing it. For inſtance, the ninth, the tenth, and the twelfth, are compos'd intervals; the firſt, of the ſecond and eighth; the ſecond, of the third and eighth; the third, of the fifth and eighth, &c.

II. Every interval which can be muſically divided into two intervals, may be conſidered as compos'd. By this means, the fifth is compos'd of two thirds; the third of two ſeconds; the major ſecond of two ſemitones; but the ſemitone is by no means compoſed becauſe it can neither be divided on the gamut or by notes. 'Tis the ſenſe of the diſcourſe which out of the two foregoing acceptations muſt determine that according to which an interval is compoſed.

III. We call compoſed meaſures, all thoſe which are expreſſed by two cyphers. (VIDE MEASURE.)

TO COMPOSE, To invent new muſic, according to the rules of the art.

COMPOSER, He who compoſes muſic, or forms the rules of compoſition. Under the word compoſition, may be ſeen the detail of

of knowledge, neceſſary for the art of compoſing. This is not yet ſufficient without a genius to put it into execution. Whatever efforts we may make, whatever acquiſitions we may have, we muſt ſtill be born to the art, otherwiſe our works can never mount above the inſipid. It is with the compoſer as with the poet. Nature herſelf muſt have form'd him ſo. What I would expreſs by genius is by no means that ſtrange capricious taſte, which ſpreads on all ſides uncouth and idle difficulties, which knows not how to ornament its harmony but by dint of diſſonances, contracts and confuſion, 'Tis an inward flame which burns, torments the compoſer, ſpite of himſelf, which continually inſpires him with airs new, and always agreeable, with expreſſions lively, majeſtic, and which touch the heart, with a harmony pure, affecting, and forcible, which adorns the air without obſcurity. 'Tis this divine guide which led Correlli, Vinci, Perez, Rinoldo, Jomelli, Durante, more ingenious than all the reſt, into the ſanctuary of harmony; Leo, Pergoleſe, Haſſe, Terradeglias, and Galuppi, into that of taſte and expreſſion.

COMPOSITION, Is the art of inventing and writing airs, of accompanying them with a ſuitable harmony; in a word, to make a complete piece of muſic with all its parts.

The knowledge of harmony and its rules, is the foundation of compoſition. Without doubt, we ought to be ſkill'd in filling concords, preparing and avoiding diſſonances, finding fundamental baſſes, and poſſeſſing every other trifling elementary knowledge; for, with the rules of harmony only, we are no more advanced in the knowledge of compoſition, than an orator with thoſe of the Grammar. I will not ſay, that it is alſo neceſſary to underſtand well the ſtave, and character of the voice and inſtruments; the airs which are eaſy or difficult of execution; what forms, and what does *not* form any effect; to feel the character of the different meaſures, and that of the different modulations; to apply the one or the other always à propos; to know all the particular rules eſtabliſhed by agreement, taſte, caprice or pedantry, as the fugues, imitations, conſtrain'd ſubjects, &c. All theſe things are nothing more than preparatives to compoſition; but we muſt diſcover in ourſelves the beautiful airs of the greater harmony, the painting, the expreſſion; in a word, we muſt be capable of collecting and forming the plan of a whole work, following its correſpondences of every kind, and making ourſelves acquainted with the mind of the poet, inſtead of amuſing ourſelves with running after the words. 'Tis with reaſon that our muſicians have given the name of words to the poems which they ſet to muſic. We clearly ſee, by their method of rendering them, that they are but words to them. It ſeems,

particularly theſe laſt years, that the rules of concord have abolished, or at leaſt rendered neglected every other; and that harmony has gained its facility only at the expence of the art in general. All our artiſts underſtand the art of filling up their muſic, but very few its compoſition.

Though the fundamental rules of counter-point be always the ſame, they yet have more or leſs rigour, according to the number of diviſions; for in proportion to the increaſe of parts, the compoſition becomes more difficult, and the rules are leſs ſevere. The compoſition in two parts is called duo, when the two parts tune equally, that is, when the ſubject is equally divided between them. If the ſubject is in one part alone, and the other only acts in accompaniment, the firſt is then called recital, or ſolo; and the other, accompaniment, or thorough Baſs, if it be a baſs. It is the ſame thing with the trio or compoſition in three parts, with the quatuor, the quinque, &c. (Vide thoſe words.)

The name of compoſition is alſo given to the pieces of muſic themſelves, made in the rules of compoſition; for which reaſon, the duo, trio, quatuor, which I have juſt mentioned, are called compoſitions.

We compoſe either for the voices only, or for inſtruments, or for the inſtruments and the voice. Church-muſic and ſongs are the only compoſitions which are for the voice alone, and to thoſe alſo ſome inſtruments are very often joined for the ſuſtaining of them. Inſtrumental compoſitions are for the choir of the orcheſtra; and in that caſe they are called ſymphonies and concerts, or for ſome particular kind of inſtrument, and they are then called pieces, ſonatas. (Vide thoſe Words.)

In regard to the compoſitions intended for the voice and for the inſtruments, they are generally divided into two principal ſorts, viz. Latin or church-muſic, and French muſic. The muſic deſtined for the church, whether pſalms, hymns, or antiennes, generally bear the name of molets. (Vide MOLET.) The French muſic is alſo divided into theatrical muſic, ſuch as our operas, and in that of a private room, as our cantatas or cantatillas. (Vide CANTATA, OPERA.)

The latin compoſition is imagined in general to require the moſt knowledge and rules, and the French the moſt genius and taſte.

In a compoſition the author has for his ſubject, the ſound phyſically conſidered, and for his object the pleaſure only of the ear, or now and then he riſes to imitative muſic, and ſeeks to touch his hearers by moral effects. In the firſt caſe, it is ſufficient for him to ſeek pleaſing ſounds and agreeable concords; but in the ſecond he ſhould conſider muſic by its connection with the accents,

cents of the human voice, and by the poſſible conformities between ſounds harmonically combined and imitable objects. Under the article opera, may be found ſome thoughts on the methods of elevating and ennobling this art, by making of muſic a language more eloquent than the diſcourſe itſelf.

CONCERT, An aſſembly of muſicians who perform pieces of vocal and inſtrumental muſic. This word concert is ſeldom uſed for an aſſembly of leſs than ſeven or eight muſicians, or a piece of muſic of many parts. In regard to the ancients, as they were ignorant of the counter-point, their concerts were executed only in uniſon or in the octave, and they ſeldom had any other but in their theatres and temples.

SPIRITUAL CONCERT, A concert which ſupplies the place of the public ſpectacle at Paris, during the time that the other amuſements are ſhut up. It is eſtabliſhed at the Château des Thuilleries, the band is very numerous, and the hall beautifully decorated. They perform their molets and ſymphonies, and amuſe themſelves now and then with ſporting in Italian airs.

CONCERTANT, Concertant parts are thoſe, according to the Abbé Bropard, which have ſomething of recital in a piece or concert, and this word ſerves to diſtinguiſh them from thoſe parts which contain ſinging only. If this has ever been its ſenſe, it is now obſolete. We ſay at preſent reciting parts, but we uſe *that* of concertant in ſpeaking of a number of muſicians who perform in a concert, and we then ſay, "We were five and twenty concertants." "An aſſembly of eight or ten concertants."

CONCERTO, An Italian word Frenchified, which ſignifies in general, a ſymphony made to be performed by the whole orcheſtra; but we call more particularly by the name of concerto, a piece made for ſome ſeparate inſtrument, which plays alone at ſet times with a ſimple accompaniment, after a beginning by the whole orcheſtra, and the piece continues always thus alternatively between the ſame inſtrument reciting, and the orcheſtra in chorus. In regard to the concertos, where all is played in Rippiéno, and where no inſtrument recites, the French call it ſometimes trio, and the Italians ſinfonie,

CONCINNOUS, I will not make any digreſſions on the explanation of this word, taken as the ſuitable connection of all the parts of a work between themſelves, and with the whole, becauſe it is a ſenſe that is ſeldom given to it in muſic. 'Tis to the execution generally that this term is applied, when the concertants are perfectly in concord, whether for the intonation or the meaſure, when they all appear to be animated with the ſame ſoul, and when the execution affords faithfully to the ear, all that the eye beholds on the partitions.

The

The concinnous does not only depend on the ingenuity with which each one reads his part, but on the underſtanding with which he feels its particular character, and its union with the whole; whether for compoſing with exactneſs, for following the preciſion of the movements, or for catching the moment and variety of the *bold*, and *ſweet*; or laſtly, for adding to the mark'd ornaments, thoſe which are ſo neceſſarily ſuppoſed by the author, that no one can be permitted to omit them. 'Tis in vain for a muſician to be ingenious; there can be nothing concinnous but from the knowledge of the muſic which he executes, and from the mutual underſtanding that he maintains with others; for it would be impoſſible to place a good *concinnous* in a concert of deaf men, or in a piece of muſic whoſe ſtile is perfectly oppoſite to thoſe who execute it. Muſic-maſters, conductors and managers of the orcheſtra, ought particularly to guide, reſtrain, or forward their muſicians, in fixing throughout a good concinnity, and this is what always forms a good firſt violin, by a particular force in the execution, which impreſſes ſtrongly its character on every ear. The reciting voice is ſubject to the baſs and meaſure; the firſt violin ſhould always attend to and follow the voice. The ſymphony ought to be attentive to the violin; and laſtly, the harpſichord, which we ſuppoſe to be held by the compoſer, ſhould be the true and firſt direction of the whole.

In general, the more character the ſtile, periods, phraſes, and harmony poſſeſs, the more eaſy is the concinnous to catch, becauſe the ſame idea impreſſed with life on every mind, preſides over the whole of the execution. On the contrary, when the muſic is ſilent, and we feel nothing more than a continuance of notes without an uniſon, there is no general object to which each one connects his part, and the execution proceeds always in a diſagreeable ſtrain. For this reaſon it is, that the French muſic is never concinnous.

TO CONFINE THE HARMONY, Is to collect each part within the ſmalleſt intervals that can be poſſible. For inſtance, to confine this concord, ut, ſol, mi, which comprehends a tenth, we muſt vary it thus, ut, mi, ſol, and in that caſe it contains no more than a fifth. (Vide CONCORD, VARIATION.)

CONCORD, An union of two or more ſounds uttered at once, and forming together a general harmonic.

The natural harmony produced by the reſounding of a ſonorous body, is compoſed of three different ſounds, without reckoning their octaves, the which form together the moſt agreeable and moſt perfect concord that can be heard; from whence, on account of its excellence, it is called a perfect concord. Thus, to render the harmony complete, every concord muſt be at leaſt compoſed of three ſounds. The muſicians alſo find in the trio,

an

an harmonic perfection, either becauſe the concords are therein entirely employed, or becauſe in the occaſions, where they do not employ them entirely, they have the art of giving a change to the ear, and produce a contrary ſenſation, by preſenting to it the principal ſounds of the concords, in ſuch a manner as to obliterate entirely the others. (Vide TRIO.) The octave, however, of the principal ſound, producing freſh connections, and new conſonances by the complements of intervals, (Vide COMPLEMENT) we generally add that octave to form the concinnity of all the conſonnances within the ſame concord. (Vide CONSONNANCE.) Moreover, the addition of the diſſonance (Vide DISSONANCE) producing a fourth ſound added to the perfect concord, it is abſolutely neceſſary, if we wiſh to fill the concord, to have a fourth part to expreſs this diſſonance. Wherefore the ſyſtem of concords can never be complete and united but by the means of four parts. We divide the concords into perfect and imperfect. The perfect concord is that which we have juſt mentioned, which is compoſed of the fundamental or flat ſound, of its third, fifth and eighth: It is ſub-divided into major or minor, according to the nature of its third. (Vide MAJOR and MINOR.)

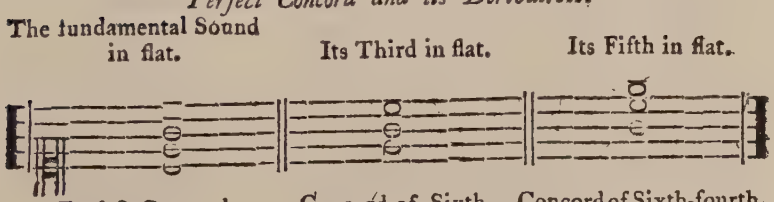
Some authors give the name of perfect alſo to all the concords, even diſſonant, whoſe fundamental ſound is in flat. The imperfect concords are thoſe which retain a ſixth inſtead of a fifth; and in general all thoſe where the flat ſound is not the fundamental. Theſe denominations, which were given before the fundamental baſs was known, are by no means applicable. Thoſe of direct or varied concords would be much more ſuitable in the ſame ſenſe. The concords are again divided into conſonant and diſſonant. The conſonant concords are the perfect concord and its derivatives; every other concord is diſſonant. (See the under-written table of each, according to M. Rameau's ſyſtem.)

## TABLE

*Of all the* Concords *admitted into Harmony.*

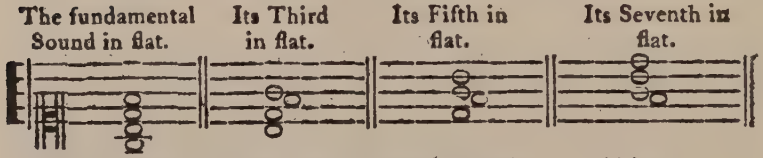
Fundamental Concords.

*Perfect Concord and its Derivatives.*



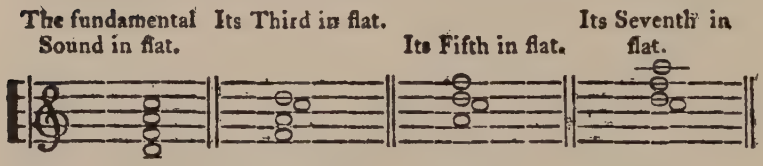
This concord conſtitutes the tone, and is formed only on the tonic: Its third may be either major or minor; and it is that which conſtitutes the mode.

*Senſible or Dominant* Concord, *and its* Derivatives.



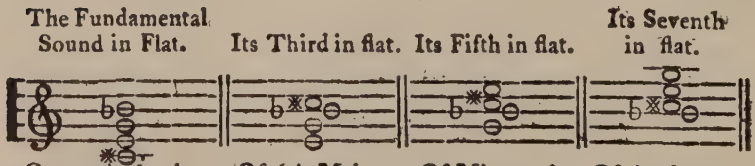

No one of the ſounds of this concord can be varied.

*Concord of the* Seventh *and its* Derivatives.




The third, fifth, and ſeventh may be varied in this concord.

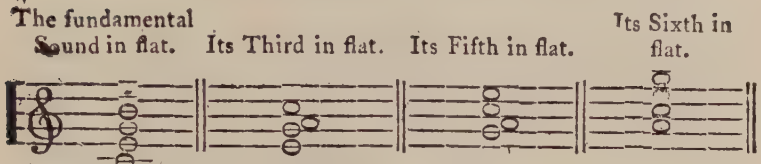
Concord *of the diminiſhed* Seventh, *and its* Derivatives.


The Fundamental Sound in Flat.
Its Third in flat.
Its Fifth in flat.
Its Seventh in flat.
Concord of 7th diminiſhed.
Of 6th Major and falſe Fifth.
Of Minor 3d and Triton.
Of the ſuperfluous 2d.

No one of the Sounds of this concord can be varied.

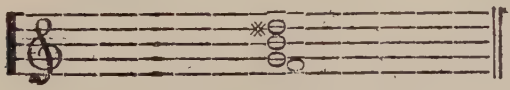
Concord

Concord *of the* Sixth *added, and its* Derivatives.


The fundamental Sound in flat.
Its Third in flat.
Its Fifth in flat.
Its Sixth in flat.
Concord of the 6th added.
Of ſmaller 6th added.
Of the 2d added.
Of the 7th added.

I join the word *added* throughout this work, to diſtinguiſh this concord and its variations from the ſimilar productions of the concord of the ſeventh. This laſt variation of the ſeventh added, is not admitted by Monſ. Rameau, becauſe this variation forms a concord of the ſeventh, and the concord of the ſeventh is fundamental. This reaſon ſeems to have little weight. We ought not then, on this plan, to admit the greater ſixth, as a variation, ſince, in the particular principles of Monſ. Rameau, this ſame concord is often fundamental. But the practice of the greateſt muſicians, and even his own, contradicts the execution which he wiſhes to eſtabliſh.

Concords *of the ſuperfluous* Sixth.



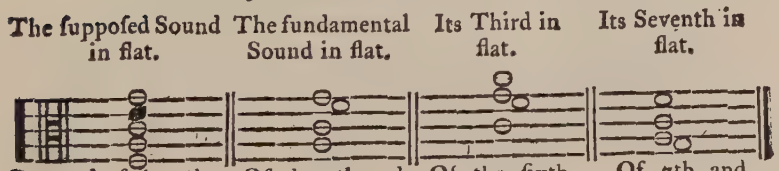
This concord has no variation; and no one of its ſounds can undergo a change. 'Tis properly no more than a concord of ſmall major ſixth dieſis'd by accident, and in which we ſubſtitute ſometimes the fifth for the fourth.

---

Concords *by* Suppoſition.

(Vide SUPPOSITION.)

Concord *of the* Ninth, *and its* Derivatives.


The ſuppoſed Sound in flat.
The fundamental Sound in flat.
Its Third in flat.
Its Seventh in flat.
Concord of the 9th.
Of the 7th and 6th.
Of the fixth-fourth and 5th.
Of 7th and 2d.

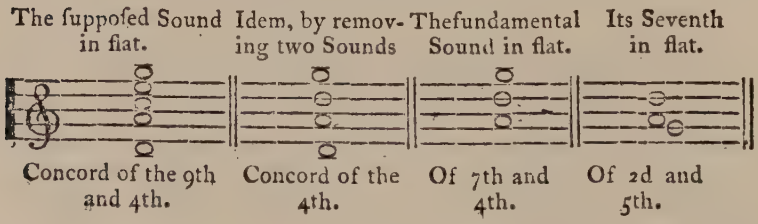
This is a concord of the Seventh, in the which we add a fifth ſound to the third beneath the fundamental.

We generally remove the ſeventh, i. e. the fifth of the fundamental ſound, which here is that note marked in black: in this caſe, the concord of the ninth may vary in removing again from the accompaniment, the eighth of the note which we carry to the baſs.

Concord *of the ſuperfluous* Fifth.

This is the ſenſible concord of a minor tone, below which we make the mediant underſtood; for which reaſon, 'tis a true concord of the ninth. But it does not vary on account of the diminiſhed fourth, which the ſuppoſed ſound carried into ſharp, would produce with the ſenſible note, which fourth is an interval expelled from harmony.

Concord *of the* Eleventh *or* Fourth.


The ſuppoſed Sound in flat.
Idem, by removing two Sounds
Thefundamental Sound in flat.
Its Seventh in flat.
Concord of the 9th and 4th.
Concord of the 4th.
Of 7th and 4th.
Of 2d and 5th.

This is a concord of the ſeventh, below which we add a fifth ſound to the fifth of the fundamental. We never ſtrike this concord full, on account of its duration. Its ninth and ſeventh are generally removed; and to vary it, this removal is indiſpenſably neceſſary.

Concord *of ſuperfluous* Seventh.

This is the dominant concord, under which the baſs forms the tonic.

Concord

Concord *of ſuperfluous* Seventh *and* Minor Sixth.

This is the concord of the diminiſhed ſeventh on the ſenſible note, under which the baſs forms the tonic.

Theſe two laſt concords have no variation, becauſe the ſenſible note and the tonic muſt then be heard together in the ſuperior parts, which can never ſucceed.

Though all the concords in this table be full and complete, as was neceſſary to ſhew all their elements, yet it is not laid down that we muſt uſe them thus: we cannot always, and we ought not often. In regard to the ſounds which ought to be preferred according to the place and cuſtom of concords; it is in this exquiſite and neceſſary choice, that the grand art of the compoſer conſiſts. (Vide COMPOSITION, MELODY, EFFECT, EXPRESSION, &c.)

*End of the Table of* Concords.

---

We will ſhew, under the words *Harmony*, *Fundamental Baſs*, *Compoſition*, *&c.* the method of employing all theſe concords, to form by them a regular harmony. I will only here add the following obſervations.

I. 'Tis a very great miſtake to imagine that the choice of variations in the ſame concord can be indifferent, either for the harmony or the expreſſion. There is not one of theſe variations but has its proper characters. Every body muſt perceive the contrariety which is found between the ſweetneſs of the falſe fifth, and the ſharpneſs of the triton, and ſtill one of theſe intervals is varied from the other. It is the ſame thing with the diminiſhed ſeventh and ſuperfluous ſecond, with the general ſecond and the ſeventh. Who does not know the ſonorous difference between the fifth and the fourth? The concord of greater ſixth and that of ſmall minor ſixth, are two repreſentations of the ſame fundamental concord: But how much is the one more harmonious than the other! The concord of ſmall major ſixth, on the contrary, is much more brilliant than that of the falſe fifth. And to ſpeak only of the moſt ſimple of all the concords, reflect on the dignity of the perfect concord, the ſweetneſs of the

the concord of ſixth; and the flatneſs of that of ſixth-fourth; all theſe are however compoſed of the ſame ſounds.

The ſuperfluous intervals, in general the dieſis's above, are proper on account of their duration, to expreſs rage, anger, and the ſharper paſſions. On the contrary, the B mollare's in ſharp, and the diminiſhed intervals, form a plaintive harmony, which touches the ſoul. There are a multitude of ſimilar obſervations, which, when a muſician knows how to manage them, render him maſter of the affections of thoſe, who liſten to him.

II. The choice of ſimple intervals is not leſs important than that of concords, in regard to the place where they ſhould be employed. For inſtance, 'tis below where the fifths and octaves muſt in preference be placed above the thirds and ſixths. Tranſpoſe this order, and you will demoliſh the harmony, tho' you leave the ſame concords.

III. Laſtly, we may render the concords ſtill more harmonious by uniting them by ſmaller intervals, much more ſuitable to the capacity of the ear than the larger. This is what we call to confine the harmony, and which ſo few muſicians are ſkilled in practiſing. The boundaries of the diapaſon of the voice are another reaſon for confining the choirs. We may be aſſured, that a choir is ill compoſed when the concords are ſcattered, when the parts have a ſqueaking note, loſe their diapaſon, and are ſo removed one from the other, as to ſeem to have no kind of connection between themſelves.

We call alſo by the name of concord, the condition of an inſtrument whoſe fixed ſounds are connected together in the exact juſtneſs which they ought to preſerve. In this ſenſe, we ſay, that an inſtrument is, or is not in concord or tune; that it keeps or does not keep its concord. The ſame expreſſion is uſed in regard to two voices which ſing together, for two ſounds, which are heard at a time, whether in uniſon or counterpart.

DISSONANT CONCORD, FALSE CONCORD, CONCORD UNTRUE, Are things ſo different, that they muſt not be confounded. The diſſonant concord is that which contains ſome diſſonance. An untrue concord, that whoſe ſounds are ill adapted, and do not preſerve together the juſtneſs of the intervals. Falſe concord, that which diſguſts the ear becauſe it is ill compoſed, and the ſounds, tho' juſt, do not form therein an entire harmonic.

CONCORDANT, or, BARYTON, is that part of muſic which is fixed in the middle, between the tenor and baſs. The name

name of concordant is no longer in uſe, but in church-muſic, no more than the part which it denotes. Every where elſe, this part is call'd common pitch of baſs, and is counfounded with the baſs. The concordant is properly the part which in Italy is called tenor. (Vide PARTS.)

CONCOURSE, An aſſembly of muſicians and authoriſed connoiſſeurs, in the which a vacant place of muſic-maſter or organiſt is gained, by the majority of votes, by him who has compoſed the beſt molet, or who has diſtinguiſhed himſelf by the beſt execution

The concourſe was in uſe formerly in a great number of cathedrals; but in theſe partial times, when the ſpirit of intrigue engroſſes the generality of places, it is clear that this muſt gradually be aboliſhed, and that in its place they have ſubſtituted methods more eaſy, by giving to favour or intereſt, the rewards due to ingenuity and merit.

CONJOINT, A conjoint tetrachord is, in ancient muſic, that whoſe flatteſt chord is in uniſon with the ſharpeſt chord of the tetrachord, which is immediately below it; or whoſe ſharpeſt chord is in uniſon with the flatteſt of the tetrachord immediately above it. So, in the ſyſtem of the Greeks, all the five tetrachords are conjoint on ſome ſide that is firſt. The tetrachord meſon is conjoint to the tetrachord hypaton. 2dly. The tetrachord ſynnéménon is conjoint to the tetrachord meſon. 3dly, The tetrachord hyperboleon is conjoint to the tetrachord diazeugmenon; and as the tetrachord, to which another was conjoint, was reciprocally conjoint to that, this would have made ſix tetrachords in all, had not the tetrachord meſon, being conoint by its two extremities, been taken twice for once.

Amongſt us, conjoint is ſaid of an interval or degree. We call conjoint degrees, thoſe which are ſo diſpoſed between themſelves, that the ſharpeſt ſound of the inferior degree becomes in uniſon with the flatteſt ſound of the ſuperior. Moreover, neither of theſe degrees conjoined muſt be divided into other ſmaller degrees, but they themſelves muſt be as ſmall as poſſible, viz. thoſe of a ſecond. Wherefore, theſe two intervals ut re and re mi are conjoint, but ut re and ſol fa are not ſo, for want of the firſt condition, ut mi and mi ſol are not alſo, for want of the ſecond.

An extent by conjoint degrees ſignifies the ſame thing as a diatonic extent. (Vide DIATONIC DEGREE.)

CONNECTED, A term in church-muſic. (Vide MIXT.)

CONSONANCE, Is, according to the Etymology of the Word, the effect of two or more ſounds heard at a time; but the ſignification of this word is generally reſtrain'd to intervals formed by two ſounds, the concord of which is pleaſing to the

ear, and 'tis in this ſenſe, that I ſhall ſpeak of it under this head.

From this infinity of Intervals which can divide the ſounds, there is but a ſmall number, which form a conſonance; all the reſt diſguſt the ear, and are therefore called diſſonances. 'Tis not fixt abſolutely that many of theſe may not be employed in harmony, but they are fixt only with thoſe precautions, of which the conſonances, always agreeable in themſelves, are not equally in want. The Greeks admitted five conſonances only, i. e. The octave, the 5th, the 12th, which is the replication of the 5th, the 4th, and the 11th, which is its replication. We add to theſe, the 3ds and 6ths major and minor, the double and triple octaves, and, in ſhort, the different replications of all theſe without exception, according to the whole extent of the ſyſtem.

We diſtinguiſh the conſonances, as perfect or juſt, whoſe interval has no variation, and as imperfect, thoſe which may be major or minor. The perfect conſonances are the 8th, 5th, and 4th; the imperfect, the 3ds and 6ths.

The principal character of conſonances is drawn from their production in a ſimilar ſound, or, if we will, from the ruſtling of the chords. Of two chords, in full concord, forming together an interval of octave, or of 12th, which is the octave of the 5th, or of 17th major, which is the double octave of the major 3d; if we make the flatteſt ſound, the other ſhakes and reſounds. In regard to the major and minor 6th, the minor 3d, the ſimple major 5th and 3d which are all combinations of the precedent conſonances, they are found, not directly, but between the different chords that ſhake in the ſame ſound.

If I touch the chord ut, the chords aſcending to its octave ut, to the 5th ſol of that octave, to the third mi of the double octave, even to the octaves of all theſe, will all ſhake, and reſound at a time; and if the firſt chord ſhould be alone, we ſhould ſtill diſtinguiſh all theſe ſounds in its reſounding. Here then are the octave, the major third, and the fifth direct. The other conſonances are found alſo by combinations, viz. the minor third from mi to ſol; the minor ſixth from the ſame mi to the ut above; the fourth from ſol to the ſame ut; and the major ſixth from the ſame ſol to the mi which is above it. Such is the generation of all the conſonances. It would be neceſſary to give an account alſo of the phœnomena.

Firſt, The ſhaking of the chords is explained by the action of the air, and the concourſe of vibrations. (Vide UNISON) Secondly, The ſound of a chord muſt be always accompanied by its harmonics, (Vide that word.) This appears a propriety of the ſound, which depends on its nature, which is inſeparable from it, and which can be explained only by hypotheſis's, which

are

are not without their difficulties. The moſt ingenious that has yet been hit on, on this matter, is, without doubt, that of Monſ. de Mairan, from which M. Rameau ſays, he has greatly profitted.

Thirdly, In regard to the pleaſure which conſonances afford the ear by the excluſion of every other interval, we ſee from thence clearly their ſource in their generation. All conſonances ariſe from a perfect concord, produced by one only ſound, and the perfect concord reciprocally is formed by an aſſemblage of conſonances. It is therefore natural, that the harmony of this concord ſhould be communicated to its parts, that each of them ſhould partake therein, and that every other interval which does not form a part of this concord ſhould not partake in it. Nature, moreover, which has endowed the objects of every ſenſe, with qualities proper for flattering it, has choſen, that one ſound, whatever it be, ſhould be accompanied with their agreeable ſounds, as ſhe has willed, that one ray of light ſhould be always formed of the fineſt colours. But if we remove this queſtion, and enquire whence ariſes the pleaſure which a perfect concord cauſes to the ear, whilſt it is diſguſted with the concourſe of every other ſound, what can we anſwer to that, unleſs to demand in our turn, why green delights the eye more than grey? and why the odour of the roſe is pleaſing, whilſt the poppy's ſmell diſguſts?

I don't deny, but that the phyſicians have explained all this, and what is there they do not explain? But how much do theſe explanations depend on conjecture, and how little ſolidity do we find in them when they are nearly examined? The reader will judge of this by the expoſition of the chief of them, which I ſhall endeavour at in as few words as poſſible.

They ſay, that when the ſenſation of the ſound is produced by the vibrations of the ſonorous body, propagated as far as the tympanum by thoſe which the air receives from this ſame body, when two ſounds are heard together, the ear is affected at the ſame time with their different vibrations. If theſe vibrations are iſochronic, that is to ſay, if they agree in beginning, and finiſhing at the ſame time, this concurrence forms the uniſon, and the ear, which catches the concord of theſe equal and juſtly concordant returns, is agreeably affected by them. If the vibrations of one of the two ſounds are double in duration to thoſe of the other, during each flatteſt vibration, the ſharp will make preciſely two, and at the third they will ſet off together. Wherefore every two times each unequal vibration of the ſharp concurs with every vibration of the flat, and this frequent concordance, which conſtitutes the octave, leſs ſweet in their opinion than the uniſon, will be more ſo than any other conſo-

nance. The 5th comes after, one of whoſe ſounds forms two vibrations, whilſt the other forms three, ſo that they agree only in every 3d vibration of the ſharp; next comes the double octave, one of whoſe ſounds forms four vibrations, whilſt the other forms but one, agreeing only in every fourth vibration of the ſharp: as to the fourth, the vibrations anſwer each other every fourth in ſharp, and every third in flat; thoſe of the major third are as 4 and 5; of the major ſixth as 3 and 5; of the minor third as 5 and 6; and of the minor ſixth as 5 and 8. Above thoſe numbers there are only their multiples, which produce conſonances, that is to ſay, the octaves of the former: all the remaining parts are diſſonant.

Others finding the octave more agreeable than the uniſon, and the fifth more agreeable than the octave, give it as a reaſon, that the equal returns of the vibrations in the uniſon, and their too frequent concurrence in the octave, confound, identify the ſounds, and prevent the ear from perceiving their diverſity. That it may feel the ſounds with pleaſure, they ſay that it is neceſſary for the vibrations to accord by intervals, but not for them to confound each other too often; otherwiſe, inſtead of two ſounds, we ſhould think to hear one only, and the ear would loſe the pleaſure of the compariſon. 'Tis in this manner, that from the ſame principle we deduce, according to our liking, the pro and con, juſt as we imagine that experience requires.

But in the firſt place, all this explanation is, as we may ſee, founded on the pleaſure only that we pretend the ſoul receives thro' the organ of hearing, from the concurrence of vibrations, which, at bottom, is nothing more than a mere ſuppoſition. Moreover, we muſt again ſuppoſe, to authoriſe this ſyſtem, that the firſt vibration of each of the two ſonorous bodies begins exactly with that of the other; for, however little one may precede, they no longer concur in a determined connection, perhaps even they can in no caſe concur, and, conſequently, the ſenſible interval muſt be ſubjected to change; the conſonance could no longer exiſt, or, at leaſt, would be entirely different. Laſtly, we muſt ſuppoſe, that the different vibrations of the two ſounds of a conſonance ſtrike the organ without confuſion, and tranſmit to the brain, the ſenſation of the concord, without a mutual injury: a thing difficult to conceive, and of which I ſhall have occaſion to ſpeak elſewhere.

But, without diſputing on ſo many ſuppoſitions, let us ſee what ought to follow from this ſyſtem. The vibrations or ſounds of the laſt conſonance, which is the minor third, are as 5 and 6, and its concord is very agreeable. What then ſhould naturally reſult from two other ſounds, whoſe vibrations were between themſelves as 6 and 7? A conſonance, a little leſs harmonious, I confeſs,

confeſs, but ſtill very agreeable, on account of the ſmall difference of their calculations, for they differ a 36th only. But let me be told how it can happen that two ſounds, the one of which forms five vibrations, whilſt the other makes ſix, can produce an agreeable conſonance; and that two ſounds, one of which makes ſix vibrations, whilſt the other forms ſeven, produce a diſagreeable diſſonance. How can it be, that in one of theſe connections the vibrations agree from ſix to ſix, and my ear is delighted; whilſt in the other they agree from ſeven to ſeven, and my ear is diſguſted? I will again enquire how it happens, that after this firſt diſſonance, the duration of the others does not increaſe in proportion to the compoſition of their connection? Why, for inſtance, is not the diſſonance which reſults from the connection of 89 to 90, much more diſguſting than than of 12 to 13? If the more or leſs frequent return of the concurrence of vibrations was the cauſe of the degree of pleaſure or pain which the concords afford me, the effect muſt be proportionate to this cauſe, and I cannot find the leaſt proportion in them.—This pleaſure and pain then cannot be derived from thence.

It ſtill remains to pay attention to the alterations of which a conſonance is ſuſceptible, tho' theſe alterations miſplace entirely the periodical concurrence of vibrations; and the concurrence itſelf becomes more ſcarce in proportion as the alteration is leſs. It remains to conſider that the concord of the organ or harpſichord can offer to the ear nothing more than a cacophony, ſo much the more diſguſting, as theſe inſtruments are more in tune, ſince, except the octave, there is found no other conſonance in its exact connection.

Can one ſay, that an approaching connection is ſuppoſed to be entirely exact, that it is received as ſuch by the ear, and that it ſupplies by inſtinct whatever is wanting to the juſtneſs of the concord? In that caſe, I enquire the cauſe of this inequality of judgment and perception, thro' which it admits connections more or leſs approaching, and baniſhes others according to the different nature of conſonances? In the uniſon, for inſtance, the ear can ſupply nothing: It is either juſt or falſe; there is no medium. In the ſame manner in the octave alſo, unleſs the interval be exact, the ear is diſguſted; it admits no approximation. For what reaſon does it admit more in the fifth, and leſs in the major third? An explanation vague, oppoſite to the principle which ſhould be eſtabliſhed, and without proof, can give no reaſon for theſe differences.

The philoſopher, who has given us ſome principles of the acouſtic, laying aſide all theſe concurrences of vibrations, and renewing on this point the ſyſtem of Deſcartes, gives a reaſon for the pleaſure which conſonances cauſe to the ear by the ſimplicity of

of connections which are between the ſounds that form them. According to this author, and Deſcartes alſo, the pleaſure diminiſhes in proportion as theſe connections become more compoſed, and when the mind partakes in them no more, they are veritable diſſonances; wherefore it is an operation of the mind which they take as the principle of an harmonic ſentiment. Moreover, though this hypotheſis may agree with the reſult of the firſt harmonic diviſions, and tho' it may extend itſelf even to other phœnomena that are diſcovered in the fine arts, as it is ſubject to the ſame objections as the preceding, it is not poſſible for reaſon to render a ſatisfactory account of it.

That of all, which appears the moſt ſatisfactory, has for its author Monſ. Eſtéve, of the Royal Society of Montpélier.—Here are his reaſonings thereon:

The ſentiment of ſound is inſeparable from that of its harmonics; and ſince every ſound bears its harmonics, or rather its accompaniment with it; this ſame accompaniment is in the order of our organs. There is in the moſt ſimple ſound, a gradation of ſounds, which are ſharper and weaker, which ſweeten, by their variety, the principal ſound, and render it loſt in the great velocity of the higher ſounds. Here then we ſee the explanation of a ſound; the accompaniment is eſſential to it, and forms its ſweetneſs and its melody. Werefore, every time that this ſweetening, this accompaniment, theſe harmonics are enforced, and better diſcloſed, the ſounds will be more melodious, the varieties better ſuſtained. This is a perfection, and the ſoul ought to be ſenſible of it.

Theſe conſonances, moreover, have this propriety, that the harmonics of each of the two ſounds, concurring with the harmonics of the other, their harmonics are mutually ſuſtained, become more ſenſible, have a longer duration, and by this means, make the concord of ſounds which produce them much more agreeable.

To make the application of this principle more evident, Monſ. Eſtéve has formed two tables, the one of conſonances, and the other of diſſonances, which are in the order of the gamut; and theſe tables are ſo diſpoſed, that we may perceive in each the concurrence or oppoſition of the harmonics of the two ſounds which form each interval.

By the table of the conſonances, we ſee that the concord of octave preſerves almoſt all its harmonics, and this is the reaſon of the identity which we ſuppoſe, in the practice of harmony, to be between the two ſounds of the octave: we ſee that the concord of the fifth preſerves three harmonics only; that the fourth has only two; and laſtly, that the imperfect conſonances preſerves but one, except the major ſixth, which bears two.

By

By the table of diſſonances, we ſee that they preſerve no kind of harmonic, except the minor ſeventh alone, which preſerves its harmonic fourth, that is, the major third of the third octave of ſharp ſounds.

From theſe obſervations, the author concludes, that the more concurrent harmonics there are between two ſounds, more will the concord be agreeable, and in this conſiſt the perfect conſonances.

The more harmonics there are deſtroyed, the leſs will the ſoul be ſatisfied with its concords: Such are imperfect conſonances. Laſtly, if it ſhould ever happen that no harmonic is preſerved, the ſounds will be deprived of their ſweetneſs and melody, they will be diſagreeable, and rendered, as it were, thin; the ſoul will be diſguſted with them, and inſtead of the harmonious ſweetneſs, which it diſcovered in the conſonances, finding nothing but a continued roughneſs, it muſt feel a ſenſation of inquietude very diſagreeable, which is the effect of diſſonances.

This is, without contradiction, the happieſt, moſt ſimple and moſt natural of every hypotheſis, but it ſtill leaves ſomething to be wiſhed for the ſatisfaction of the mind, ſince the cauſes which are aſſigned are not always in proportion to the difference of the effects; as, for inſtance, it confounds in the ſame cathegory, the minor third and the minor ſeventh, as equally reduced to one harmonic only, tho' the one is conſonant and the other diſſonant, and the effect, to the ear, is as different as poſſible.

In regard to the principle imagined by Monſ. Sauveur, which he made to conſiſt in the ſtrokes, as it can by no means be ſuſtained, and has been adopted by no one, I will not employ it here, as it will ſuffice to direct the reader to what I have ſpoken of it under the word Beatings.

CONSONANT, A conſonant interval is that which gives a conſonance, or produces the effect of one, which happens, in certain caſes, to diſſonances, thro' the force of the modulation. A conſonant concord is that which is compoſed of conſonances only.

CONSTRAIN'D, This word is applied either to the harmony, the air, or the power of the notes, when, through the nature of the deſign, we are tied down to a law of uniformity in ſome one of the three parts. (Vide Bass Constrain'd.)

TO CONTINUE, To continue on a ſyllable, is to prolong it farther than proſody requires, as we do in trills; and to continue on a note, is to make a line therein, or to prolong it until the ſenſation of the meaſure be forgotten.

CONTRA,

CONTRA, A name given formerly to that part which was more generally called Altus, and which, at preſent, we name Haute Contre.

CONTRAST, An oppoſition of characters There is a contraſt in a piece of muſic when the movement paſſes from ſlow to quick, or from quick to ſlow; when the diapaſon of the melody paſſes from flat to ſharp, or from ſharp to flat; when the air paſſes from ſweet to bold, or from bold to ſweet; when the accompaniment paſſes from ſimple to figured, or from figured to ſimple. Laſtly, when the harmony has clear and full alternatives; and the moſt perfect contraſt is that which reunites all theſe oppoſitions at the ſame time.

It is very common for compoſers, who are barren in invention, to make a wrong uſe of the contraſt, and to ſeek in that, for the ſake of preſerving the attention, thoſe reſources with which their genius is incapable of finiſhing them. But the contraſt, employed à propos, and managed with propriety, produces an effect particularly admirable.

CONTRA TENOR, A name given in the beginning of counter point, to that part, which has ſince been ſtiled, tenor only.

CONTRARY SENSE, A fault, into which the muſician falls, when he renders a different thought from that which he ought.—Muſic, ſays Monſ. D'Alembert, being nothing more than a tranſlation of the words which are ſet to an air, it is viſible, that we can fall into a contrary ſenſe, neither can it be avoided more eaſily than in a literal tranſlation. Contrary ſenſe, in expreſſion, is when the muſic is ſad inſtead of being gay, gay inſtead of being ſad, light inſtead of being heavy, heavy inſtead of being light, &c. Contrary ſenſe, in proſody, is when we render long ſyllables ſhort; or ſhort, long; when we do not obſerve the accent of the language, &c. Contrary ſenſe, in declamation, is when we expreſs, by the ſame modulations, oppoſite and different ſentiments; when we are more attentive to the words than the ſentiments; when we lay a ſtreſs on ſuch details as we ought to ſlide over; and when our repetitions are brought in contrary to nature. Contrary ſenſe, in punctuation, is when a muſical phraſe is terminated by a perfect cadence in thoſe places where the ſenſe is ſuſpended, or forms an imperfect ſtop where the ſenſe is concluded. I ſpeak here of contrary ſenſes in the rigour of the word; but a want of expreſſion is, perhaps, more diſguſting than all theſe. I even had rather the muſic ſhould ſpeak contrary to what it abſolutely ought, than that it ſhould produce a confuſion of nothing at all.

CONTRE

CONTRE CHANT, A name given by Gerſon, and others, to that which was then more generally called Deſcant, or Counter-point. (Vide thoſe words.)

COPIER, He whoſe profeſſion it is to copy muſic.

How great a progreſs ſoever the art of typography may have made, we have never been able to apply it to muſic with ſo great ſucceſs as to writing: whether it be becauſe the taſte of the mind being more ſtable than that of the ear, we are not ſo ſoon tired with the ſame books as with the ſame ſongs, or by the particular difficulties which the combination of the notes and lines add to the impreſſion of muſic; for if we draw firſt the lines, and then the notes, it is impoſſible to give their relative poſitions that juſtneſs which is neceſſary; and if the character of each note engroſſes a portion of the ſcale, as in our printed muſic, the lines are ſo miſerably adjuſted together, ſo great a quantity of characters are required, and the whole produces ſo diſagreeable an effect to the ear, that this method has been aboliſhed with reaſon, and the engraving has been ſubſtituted in its place. But beſides the other inconveniencies that engraving is ſubject to, it has particularly that of augmenting too much or too little the examples or parts; of placing in partition what ſome would chuſe in ſeparate parts; and in ſeparate parts what others would chuſe to be in partition; and laſtly, of offering to the curious nothing but ancient muſic, which has paſſed thro' the hands of half the world. It is certain, that in Italy, the country which produces the greateſt variety of muſic, they have aboliſhed ſome time the printed note, without the engraving having been able to eſtabliſh itſelf; from whence I conclude, that in the opinion of the ingenious, that of the ſimple copy is the moſt preferable.

It is of greater importance, that muſic ſhould be correctly and neatly copied than ſimple writing, becauſe he who reads and reflects in his cloſet, may eaſily correct the errors of his book, whilſt nothing prevents him from ſuſpending and re-beginning his diſcourſe; but in a concert, where each one ſees but his part, and where the velocity and continuance of the execution leave no time for rectifying any error, they are all irreparable; a moſt ſublime piece is often murdered, the execution is interrupted, and even ſtopped; every thing goes contrary, the effect and uniſon fails throughout, the hearer is diſguſted, and the author diſcountenanced thro' the error only of the copier.

Moreover, the underſtanding of a difficult piece of muſic depends greatly on the manner of its being copied, for beſides the neatneſs in the notes, there are different methods to repreſent more clearly to the reader, the ideas that we would paint to him, and which he ſhould underſtand. We often find the copy of one

man more legible than that of another, tho' the latter may prick his notes more agreeably; the cauſe of which is, that the one wiſhes to pleaſe the eye, whilſt the other is attentive to more ſerviceable endeavours!

The moſt ingenious copier is he whoſe muſic is executed with the moſt eaſe, without the muſicians perceiving ever the reaſon why.—All this has perſuaded me that I ſhould not compile an uſeleſs article, if I demonſtrated in brief an account of the duties and cares of a good copier. Every thing that tends to facilitate the execution, is by no means indifferent in the perfection of an art, of which it is always the moſt material beauty. I feel how much I ſhall injure myſelf if my works are compared with my rules; but I am not ignorant that he who ſeeks the public utility, ſhould never have a remembrance of his own. As a man of letters, I have ſpoken of my condition all the evil I think of it: I have compoſed French muſic, and love only the Italian; I have ſhewn all the diſadvantages of ſociety, at the time when it gave me a ſincere pleaſure; as a bad copier, I here demonſtrate the laws by which the ingenious are directed. O truth! my intereſt never prevailed in oppoſition to thee, and may it never in any reſpect eraſe the adoration which I owe to thee!

I muſt primarily ſuppoſe, that the copier is poſſeſſed of all the knowledge neceſſary to his profeſſion. I even ſuppoſe him endued with the talents neceſſary for a ſuperiority in its performance. What are theſe talents, and what is this knowledge? Without abſolutely delineating them, I can, under this head, give a ſufficient idea of them. All that I am privileged to ſay here, is, that the compoſer who thinks himſelf ingenious, may be very far from being ſufficiently ſo to copy correctly the compoſition of another.

As written muſic, particularly in partition, is made to be read by concertants at a diſtance, the chief thing to be obſerved by the copier, is to make uſe of the convenient materials for rendering his notes moſt neat and legible. For this reaſon, he ſhould chuſe ſtrong fair paper, rather thin, and which does not ſink; that which does not require waſhing is generally preferred, becauſe the waſhing with allum takes off ſomething of its whiteneſs. The ink ought to be very black, without either gloſs or gum; the ruling neat, equal, and well fixed, but not ſo black as the notes; on the contrary, the lines ſhould be rather pale, ſo that the crotchets, double crotchets, pauſes, and other ſmaller ſigns may not be confounded with them, and that the note may be expreſſed the fuller. The paleneſs of the lines, far from preventing the muſic to be read at a fixed diſtance, on the contrary, aſſiſts it by its neatneſs, and tho' the line ſhould now and then eſcape the ſight for a moment, the poſition of the notes very often

often of itſelf denotes it. The ruling of the paper is but an uſeleſs labour. If the copier would gain himſelf credit, let him rule his paper himſelf

There are two formations for ruled paper, one for the French muſic, the length of which is from the bottom to the top; the other, for the Italian, the length of which is according to the direction of the lines. We may make uſe of the ſame paper for the two, by clipping and ruling it contrary ways; but when we buy it ruled we muſt change the names at the paper-ſellers, and aſk for Italian paper when we want the French, and French when we want Italian; this qui pro quo is of little importance when we are acquainted before-hand.

To copy a partition, we muſt reckon up the parts which the ſcale comprehends, and chooſe paper which has by the page the ſame number of ſtaves, or a multiple of that number; finally, we ſhould loſe no ſtave, or, at leaſt, as little as poſſible when the multiple is not exact. The Italian paper has generally ten ſtaves, which divides every page into two columns, each of five ſtaves for the ordinary airs, that is to ſay, two ſtaves, for the two trebles of the violin, one for the fifth, one for the air, and one for the Baſs. When we have duo's, or pieces of muſic for flutes, hautboys, horns, or trumpets, in that caſe, to that number of ſtaves we can put no more than one column in the page, unleſs we can find a method for ſuppreſſing ſome uſeleſs ſtave, as that of the fifth, when it is continually in motion on the baſs.

Herein, however, are ſome obſervations, which we ſhould make to diſtribute the partitions with exactneſs. Firſt, whatever number of parts of ſymphony we may have, it is always neceſſary that the parts of the violin, as being principal, ſhould be placed at the top of the column, where the eyes may be moſt eaſily conveyed. Thoſe who place them at the bottom of all the reſt, and immediately on the fifth, for the convenience of the accompaniment, are in an error, without obſerving that it is ridiculous to ſee in a partition, the parts of the violin below, for inſtance, thoſe of the horn which are of a much deeper baſs. Secondly, in the whole length of every piece, we ought never to change any thing in the number of the parts, ſo that every part may have its properties in the ſame place.

It would be better to leave the ſtaves vacant, or, if there is a neceſſity, place two parts in ſome of them, than to extend or diminiſh the column unequally. This rule is for the Italian muſic only, for the uſe of engraving has made the French muſic more attentive to the œconomy of the ſpace, than to the commodity of the execution. Thirdly, it is only at the greateſt extremity that we ſhould place two parts on the ſame ſtave, and this is what we ought particularly to avoid in the parts of the violin;

violin; for, beſides that there is much confuſion to be feared, there would be an equivocation with the double chord; we muſt always alſo be careful, that the parts do not interfere croſs ways, which we could not expreſs on the ſame ſtave. in a method clear and legible. Fourthly, the keys being correctly written, and once numbered, ſhould never be repeated any more than the ſign of the meaſure, unleſs in the French muſic, when, the columns being unequal, each one could not recollect his parts; but in the ſeparated parts, we muſt repeat the cliff at the beginning of each ſtave, were it only to denote the beginning of the lines, on a failure of the column.

The number of ſtaves being thus fixed, we muſt make a diviſion of the meaſures, and theſe meaſures ought to be all equal in ſpace as well as duration, to meaſure in ſome reſpect the time by the compaſs, and to guide the voice by the eyes. This ſpace ought to be ſufficiently extended in each meaſure, to receive all the notes which can enter therein, according to its greateſt ſub-diviſion. It cannot be imagined how great a clearneſs this caſe throws on a partition, and in what an embarraſſment a neglect of it throws them. If we confine a meaſure on a crotchet, how can we place the ſixteen double crotchets, which, perhaps, another part contains in the ſame meaſure. If we confine ourſelves to the vocal part, how can we fix the ſpace of the returns? In a word, if we are attentive only to the diviſions of one of theſe parts, how can we make the diviſions of the other parts, often contrary to coincide with them.

It is not ſufficient to divide the air into equal meaſures, we muſt alſo divide the meaſures into equal times. If in each part we proportionate thus the ſpace to the duration, all the parts, and all the ſimultaneous notes of each part will correſpond with a juſtneſs which will give pleaſure to the eye, and will greatly facilitate the reading of a partition. If, for inſtance, we divide a meaſure into four times, into four ſpaces very equal together, and in each part, if we extend the crotchets, draw the quavers nearer, and confine the ſemi-quavers in proportion, and each in its ſpace, without wanting to look at one part, in copying another, all the correſponding notes will be more exactly perpendicular than if they had been confronted by writing them, whether between the different meaſures of the ſame part, or between the different parts of the ſame meaſure.

To the exactneſs of the connections, we muſt join as much as poſſible, a neatneſs in our ſigns. For inſtance, we ſhall never prick uſeleſs notes; but as ſoon as we perceive that two notes re-unite, and are in uniſon, we ought to ſeparate the one from the other, when they are near each other, and on the ſame cliff. In regard to the fifth, as ſoon as its courſe is on the octave of the

the baſs, we muſt act alſo in the ſame manner. An equal attention of not multiplying our ſigns without a cauſe, ſhould prevent us from making piano's as a ſymphony at the beginning of an air, and the forte's when it concludes. Every where elſe we muſt write them exactly under the firſt violin and the baſs; and this is ſufficient in a partition where all the parts can, and ought to make thoſe their grand object.

Laſtly, It is the duty of a copier, when he writes a partition, to correct all the falſe notes which he may find in the original. I don't mean, by falſe notes, the faults of the work, but thoſe of the copy which ſerves as its original. The perfection of his conſiſts in rendering faithfully the ideas of the author; good or ill, that is not his buſineſs, ſince he is neither author or corrector but copier only. It is very true, that if the author has, by miſtake, placed one note for another, he ought to correct it. but if this ſame author has, through ignorance, made an error in the compoſition, he ſhould leave it. Let him compoſe better himſelf if he will or can, and well; but whenſoever he copies, he ſhould have an eye to his original. We ſee by this means, that it is not ſufficient for a copier to be a good harmoniſt, and to underſtand well the compoſition, but he ſhould, into the bargain, be well ſkilled in the different ſtyles, and be converſant in an author by his method, to know what he has, and what he has not compoſed. There is, moreover, a kind of criticiſm neceſſary to reſtore a paſſage by the compariſon of another, to replace a forte or a dolce where it has been omitted, which is not uncommon in the partitions; even to diſunite alſo phraſes improperly joined, and to reſtore meaſures before ejected. Knowledge and taſte are certainly neceſſary to re-eſtabliſh a text in its full purity. It may be ſaid, few copiſts can perform it: I anſwer, that it is incumbent on all.

Before I finiſh what appertains to the partitions, I muſt ſpeak of the method of collecting the ſeparated parts; a laborious taſk from many copiers, but ſimple and eaſy when we undertake it by method.—For this purpoſe, we muſt firſt reckon carefully the meaſures in each part, to ſatisfy ourſelves that they are correct. Then we place all the parts one on the other, beginning by the baſs, and covering it ſucceſſively with the other parts in the ſame order as they ought to have in the partition. We compoſe the columns of as many ſtaves as there are parts, divide them into equal meaſures, then placing all theſe parts thus ranged before us, on the left hand, we firſt copy the firſt line of the firſt part, which I imagine to be the firſt violin, make a ſlight mark with the pencil at the place where we ſtop, and then continue it, being turned back to the right. We copy in the ſame manner the firſt line of the ſecond violin, returning to the firſt where-

ever their courſe is in uniſon; then making a mark as before, we change the preceding part to the right, and proceed in the ſame manner with all the parts one after the other. When we are at the baſs, we run over with the eye the whole column, to diſcover if the harmony is good, if the whole is in concord, and if there are no errors: The firſt line being made, we take together all the parts which were changed one on the other on the right hand, and we once again change them on the left; they are then found in the ſame order, and in the ſame ſituation, as when they began: we then begin the ſecond column at the pencil mark; we make another mark at the end of the ſecond line, and we continue as before till the whole is completed.

I ſhall have little to ſay on the method of drawing a partition into ſeparate parts, for this is the moſt ſimple operation of the art, and it will be ſufficient to make thereon the following obſervations. Firſt, we muſt ſo compare the length of the pieces to what a page may contain, as never to be obliged to turn on the ſame piece in inſtrumental parts, unleſs there are a great number of meaſures to reckon, which will afford time. This rule obliges us to begin at the page verſo all the pieces, which takes up more than a page, and there are none which fill more than two. Secondly, the dolce's and the forte's ſhould be marked with the greateſt exactneſs on all the parts, even thoſe where the air begins and finiſhes, which are not ordinarily on the partition. Thirdly, we ought never to divide a meaſure frome one line to another, but endeavour that there ſhould be always a bar at the end of each ſtave. Fourthly, all the additional lines which exceed, either above or below, the five of the ſtave, ſhould by no means be continued, but ſeparated at each note, for fear that the muſician, confounding them with thoſe of the ſtave, ſhould be deceived in his note, and know no longer where he is. This rule is not leſs neceſſary in the partitions, and is followed, however, by no French copier. Fifthly, the parts of the hautboy which are drawn on the parts of the violin for a full band, ſhould never be exactly copied as they are in the original, but, beſides the extent which that inſtrument has leſs than the violin, beſides the dolce's which it cannot equally perform, beſides the velocity which is wanting, or which ſuits it ill in certain quick paſſages, the force of the hautboy ſhould be managed to mark the principal notes better, and give a greater accent to the muſic. If I had to judge of the taſte of a ſymphoniſt without hearing him, I would give him a leſſon on the part of the violin and hautboy; every copier ſhould be ſkilled in thoſe. Sixthly, the parts of horns and trumpets are ſometimes pricked on a different tone from the reſt of the air; we muſt tranſpoſe them in the tone, or at leaſt, if we copy them juſt as they are, we muſt write

write above the titles of the true tonic, Corni in D ſol, re; Corni in E la, fa, &c. &c. Seventhly, we muſt never vary the part of fifth, or of the viol from the cleff of the baſs, and its own, and thereon we have another attention to beſtow, which is to tranſpoſe to the cleff of the viol all the places wherein its courſe is with the baſs: we muſt never let the viol riſe above the parts of the violin, ſo that, when the baſs aſcends too high, we muſt not take down the octave, but the uniſon, ſo that the viol may never leave that medium which is ſuitable to it. Eighthly, the vocal part ſhould never be copied but in partition with the baſs, ſo that the ſinger may accompany himſelf, and not have the trouble either to hold his part in the hand, or to reckon his pauſes. In the duets and trios, each part of the air ought to contain, beſides the baſs, its counter part, and when we copy a limited recitative, we ſhould for each inſtrumental part add to its own the part of the air, to guide it on a default in the meaſure. Ninthly and laſtly, in the vocal parts we muſt be careful to unite or diſunite the chords, ſo that the ſinger may clearly ſee thoſe which belong to every ſyllable. The partitions which come out of the compoſer's hands, are very equivocal in this point, and the ſinger cannot tell, the chief part of the time, how to render the notes ſuitable to the words. The copier, ſkill'd in proſody, and who knows exactly the accent of the words and that of the air, determines the diviſion of the notes, and prevents the doubts of the ſinger. The words ſhould be written exactly under the notes, and very correct in regard to the accent and orthography; but they ſhould have neither ſtops or commas, as the frequent repetitions being ſo irregular, render a grammatical punctuation impoſſible; 'tis for the muſic to punctuate the words; the copier has no concern therein; for this would be an addition of thoſe ſigns which the compoſer is bound to render uſeleſs.

I will conclude for fear of carrying this article to too great a length, I have already ſaid too much for a good copiſt, who is ingenious, and has a taſte for his occupation: I can never ſay enough for others. I will only add a word in finiſhing: There are ſeveral intermediaries between what the compoſer plans, and what the audience hear. 'Tis the duty of the copier to connect theſe two terms as near as poſſible, to mark with preciſion every thing which ſhould be done, that the muſic when executed may render to the compoſer's ear, exactly what was plann'd within his head at the time of the compoſition.

CORD or CHORD SONOROUS, Is every extended Chord from whence a ſound can be drawn. For fear of going out of my depth on this article, I will tranſcribe, in part, that of Monſ.

WELSH COLLEGE LIBRARY

D'Alembert, and add nothing more of my own than what has an immediate connection with ſound and muſic.

" If an extended chord is ſtruck in ſome one of its points by " any power, it will dilate itſelf to a certain diſtance from the " ſituation in which it before reſted, it will then return and " make vibrations by virtue of the elaſticity which its extenſion " gives it. If, moreover, the compoſition of this chord is na- " turally elaſtic, or ſufficiently homogenous for the ſame mo- " tion to be communicated to all its parts, it will make a ſound " in ſhaking, and a reſounding will always accompany its vi- " brations. The geometricians have diſcovered the laws of " theſe vibrations, and muſicians, thoſe of the ſounds which re- " ſult from them.

" It has been long known by experience, and reaſonings fool- " iſh enough, that every thing elſe being equal, the more a " chord was extended, the quicker were its vibrations; that on " an equal extenſion, the chords cauſed their vibrations more or " leſs quick, in proportion as they were leſs or longer, that is " to ſay, that the proportion of the lengths was always inverſe " to that of the number of vibrations. Mr. Taylor, a cele- " brated Engliſh geometrician, is the firſt who has demonſtrated " the law of the vibrations of the chords with any exactneſs, " in his ingenious work, entitled Methodus Incrementorum " Directa & Inverſa, 1715; and theſe ſame laws have been ſince " demonſtrated by Monſ. Jean Bernouilli, in the ſecond volume " of his Memoirs of the Imperial Academy of Peterſburg." From the formula which reſults from theſe laws, and which may be found in the Encyclopœdia, under the article chord, I draw the three following corollaries, which ſerve as principles to the theory of muſic.

I. If two chords of the ſame compoſition are equal in length and thickneſs, the number of their vibrations in equal times will be as the roots of the numbers, which expreſs the connection of the extenſion of the chords.

II. If the extenſions and lengths are equal, the numbers of the vibrations in equal times will be in inverſe proportion to the thickneſs or diameter of the chords.

III. If the extenſions and the thickneſſes are equal, the number of vibrations in equal times will be in inverſe proportion to the lengths. For the underſtanding theſe theorems, I ſhould have firſt lain down as a rule, that the extenſion of the chords is not repreſented by the extending weights, but by the roots of thoſe weights; wherefore the vibrations being as the fourth of the roots of the extenſions, the extending weights are between themſelves as the cubes of thoſe vibrations, &c. &c.

From

From the laws of the vibrations of the chords are deduced thoſe of the ſounds, which reſult from thoſe ſame vibrations in the ſonorous chord. The more vibrations a chord performs within a given time, the more ſharp are its ſounds; the leſs vibrations it forms, the flatter: ſo that the ſounds following between themſelves, the connections of the vibrations, their intervals are expreſſed by the ſame connections, which ſubmits the whole of the muſic to a calculation.

We ſee by the preceding theorems, that there are three methods of changing the ſound of a chord, i. e. by changing the diameter; that is, the thickneſs of the chord, or its length, or its extenſion. What theſe alterations produce ſucceſſively on the ſame chord, may be produced at once on different chords, by giving them different degrees of thickneſs, length or extenſion. This method combined is what is uſed in general in the concord and playing of the harpſichord, the violin, the baſs, guittar, and other ſimilar inſtruments compoſed of chords of different thicknefſes and differently extended, which conſequently muſt have different ſounds.

Moreover, in the one, as the harpſichord, theſe chords have different lengths fixed, by the which the ſounds are varied again, and in the others as the violin, the chords, tho' equal in fixed length, are ſhortened or lengthened by the finger of the player, at will; and this finger being advanced or drawn back on the handle, perform then the office of moveable bridges, which give to the chord ſhaken by the fiddle ſtick, as many different ſounds as lengths. In regard to the connection of the ſounds and their intervals, in relation to the length of the chords and their vibrations, ſee SOUND, INTERVAL, CONSONANCE.

The ſonorous chord, beſides the principal ſound which reſults from the whole of its length, emits other neceſſary ſounds leſs ſenſible, and theſe ſounds ſeem to prove that this chord does not only vibrate in its whole length, but makes each of its aliquots alſo vibrate in particular, according to the law of their dimenſions. To which I ſhould add, that this propriety which ſerves, or ought to ſerve as a foundation for all harmony, and which many attribute not to the ſonorous chord, but to the air which this ſound emits, is not particular to chords only, but may be found in all ſonorous bodies. (Vide CORPO SONORO.)

Another not leſs ſurpriſing propriety of the ſonorous chord, and which attends on the preceding, is that if the bridge that divides it leans but lightly, and leaves a little communication between the vibration of one part and the other, then, inſtead of the total ſound of one or both parts, we hear only the ſound of the greater aliquot common to both parts. (Vide HARMONIC SOUND.)

The

The word chord is taken figuratively in compoſition for the fundamental ſounds of the mode; and we often call *Chords of Harmony* thoſe notes of the baſs, which, by favour of certain diſſonances, prolong the phraſe, vary and incorporate the modulation.

CORPO SONORO, By this name is called every body which renders, or may immediately render, a ſound. It does not follow from this definition, that every inſtrument of muſic is a corpo ſonoro; this name ſhould be given only to that part of the inſtrument which ſounds from itſelf, and without which there would be no ſound. Thus in a violincello, or in a violin, every chord is a corpo ſonoro; but the caſe of the inſtrument, which only reſounds or reflects, the ſound is by no means a a corpo ſonoro, neither does it form a part. We ſhould have this article before us, whenever there is occaſion to ſpeak of a corpo ſonoro in this work.

CORPO VOCE, The voice has different degrees of force as well as of extent. The number of theſe degrees which each contain, bears the name of corpo voce, when we ſpeak of the force, and *volume*, when of extent. Vide VOLUME. So, from two ſounds ſimilar, and producing the ſame ſound, that which fills the ear ſtrongeſt, and is heard at the greateſt diſtance, is ſaid to have a greater corpo or body. In Italy, the chief qualities that are ſought for in voices, are juſtneſs and flexibility, but in France, the corpo voce is the grand aim.

CORYPHÆA, He who conducted the band in the Grecian entertainments, and beat the time in their muſic. (Vide TO BEAT TIME.)

COUNTER FUGUE, A kind of fugue whoſe direction is oppoſite to that of another fugue, which has been before eſtabliſhed in the ſame piece. So when the fugue is heard by aſcending from the tonic to the dominant, or from the dominant to the tonic, the counter fugue ſhould be heard by deſcending from the dominant to the tonic, or from the tonic to the dominant, and vice verſa. In other particulars, theſe rules are entirely ſimilar to thoſe of the fugue. (Vide FUGUE.)

COUNTER HARMONIC, The name of a kind of proportion. (Vide PROPORTION.)

COUNTER PART, This term is uſed in muſic, only to ſignify one of the two parts of a duet conſidered relatively with the other.

COUNTER POINT, This is nearly the ſame thing with compoſition, unleſs that compoſition may be ſaid of airs, and of a ſingle part; and counter-point is ſaid of harmony only, and of a compoſition of two or more different parts.

This

This term of counter-point is derived from what in ancient times the notes or ſigns of ſounds were with ſimple points, and in compoſing theſe with many parts, theſe points were placed over each other, or oppoſite.

At preſent, the name of counter-point is eſpecially applied to the parts added on a given ſubject, taken ordinarily from the muſic of the church. The ſubject may be in tenor, or ſome other ſuperior part; and in that caſe we ſay, that the counter-point is below the ſubject; but it is generally in the baſs, which places the ſubject below the counter-point. When the counter-point is ſyllabic, or note upon note, it is called ſimple counter-point; figured counter-point, when there are found different figures or powers of the notes, and when there are formed deſigns, fugues, or imitations. We eaſily ſee that this cannot be done but by aſſiſtance of the meaſure, and that this church melody then becomes a true muſic. A compoſition formed and inſtantly executed, without preparation, on a given ſubject, is called an air at ſight, becauſe then each one compoſes extempore his part, and his air on the book of the choir.

COUNTER TEMS, A meaſure in counter-time is that in which we pauſe on a weak time, and ſlide over in a ſtrong, and in which the air ſeems to be in contrary ſenſe with the meaſure.

COUNTER TENOR, That of the four parts of muſic, which belongs to the ſhrilleſt and cleareſt voices of men, in oppoſition to the counter baſs, which is for the deepeſt and moſt flat. (Vide PARTS.)

In the Italian muſic, this part which they call contr 'alto, and which anſwers to the counter-tenor, is almoſt always ſung by the upper baſs, whether of women or of caſtratos. In effect, the counter-tenor is by no means natural for a man's voice, it muſt be forced to be raiſed to that diapaſon, and whatever we do, it has always a ſharpneſs, and ſeldom any juſtneſs.

COUNTRY DANCE, The air of a kind of dance which bears the ſame name, which is performed by 4, 6, or 8 perſons, and which is generally danced at a ball after the minuets, as being the moſt lively and entertaining of any thing of the kind. The tunes of the country dances are commonly of two times; they ſhould be full cadenced, pleaſing and gay, and ſtill have a great deal of ſimplicity; for as they are often re-performed, they would be diſguſting if of a heavy compoſition. The moſt ſimple things in every kind are always thoſe of which we are leaſt tired.

COUPLET, A name given in country ballads and other ſongs to that part of the poetry which in odes is called ſtrophe. As all couplets are compoſed in the ſame meaſure of verſe, they are

are alſo ſung to the ſame air, which is often the cauſe of murdering the accent and proſody, becauſe two French verſes are not leſs in the ſame meaſure, though the long and ſhort may not be in the ſame places.

COUPLETS, Is alſo ſaid of the doubles and variations which are made in the ſame air, by taking it up ſeveral times with freſh changes, but always without diſfiguring the foundation of the air, as in the Spaniſh airs and antient chacons. Every time that an air is taken up with a different variation, a freſh couplet muſt be made. (Vide VARIATIONS.)

COURANT, An air appropriated to a kind of dance which has the ſame name, on account of the goings in and out with which it is filled more than any other. This air is generally of a three flat timed meaſure, and is marked in a triple of minums with two renewals. It is no longer uſed, any more than the dance which bears its name.

COURONNE, A kind of C contrary ways, with a dot in the middle, which is formed thus ⊙.

When the couronne, which is alſo called the ſign of a pauſe, is at once on all the parts of the correſponding note, it is the ſign of a general ſtop; the meaſure ſhould be ſuſpended there, and we may even ſometimes finiſh by this note. In general, the principal part therein makes at will ſome paſſage which the Italians call cadenza, whilſt all the reſt prolong and ſuſtain the ſound which is ſet down for them, or even make an entire pauſe. But if the couronne is on the final note of a ſingle part, then it is called point d'orgue, and denotes, that the ſound of that note muſt be continued until the other parts reach their natural concluſion. It is uſed alſo in canons, to ſpecify the place where all the parts may finiſh when they draw near a concluſion. (Vide PAUSE, CANON, &c. &c.)

CROME, This Italian plural ſignifies demi-crotchets. When this word is found written under crotchets or minums, it ſignifies the ſame as the parentheſis would, and denotes, that each note muſt be divided into demi-crotchets, according to its powers.

CROQUE NOTE, A name given in deriſion to thoſe ſilly muſicians, who, verſed in the combination of notes, and capable of performing the moſt difficult compoſitions at ſight, execute in general without ſentiment, without expreſſion, and without taſte. A croque ſol rendering rather the ſounds than the phraſes, reads the moſt energetic muſic, without the leaſt comprehenſion, as a ſchool maſter would read a maſter piece of eloquence, written in his own language, in a language of which he had no ideas.

CROTCHET,

CROTCHET, a note of muſic which is formed thus , or thus , and which is equal to two demi-crotchets, or the half of a minum. In our ancient muſic they made uſe of ſeveral ſorts of crotchets: crotchet with a tail, ſquare crotchets, and crotchets in a lozenge. Theſe two laſt ſorts continue in church muſic, but in ours we only uſe the crotchet with a tail. (Vide POWER of the NOTES.)

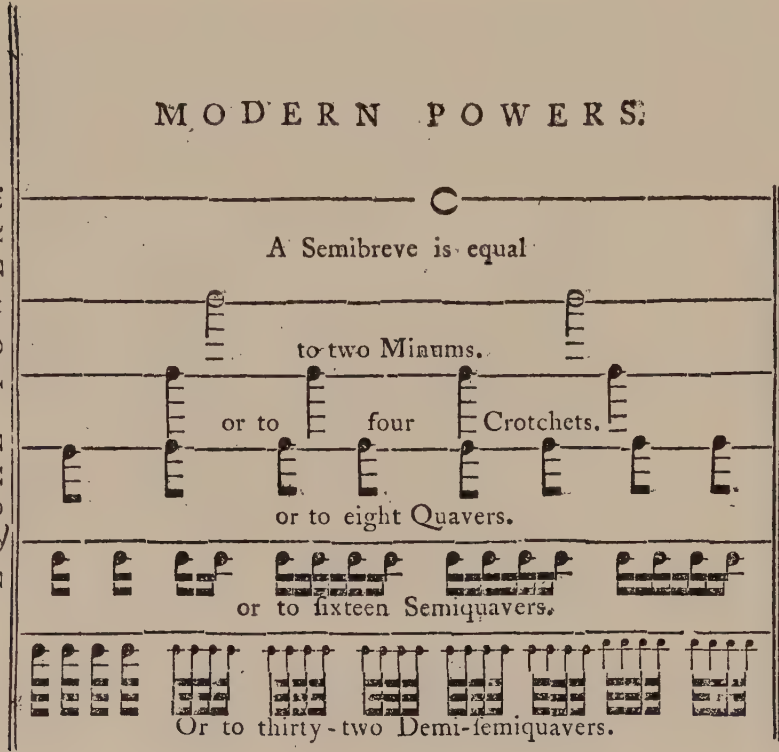
CROCHET DEMI, A note in muſic which is equal in duration to the fourth of a minum only, or the half of a crotchet. Eight demi-crotchets are conſequently neceſſary for a ſemi-breve, or a four timed meaſure.

We may here ſee the form of the demi-crotchet, whether alone, or ſung alone on a ſyllable; whether united with others when we paſs over many at the ſame time in playing, or on the ſame ſyllable in ſinging. They are generally united by fours in a four or a two timed meaſure; by threes in the ſix or eight timed meaſures, according to the diviſion of the time; and by ſixes in a third timed meaſure, according to the diviſion of the meaſures.—CORRESPONDENT.

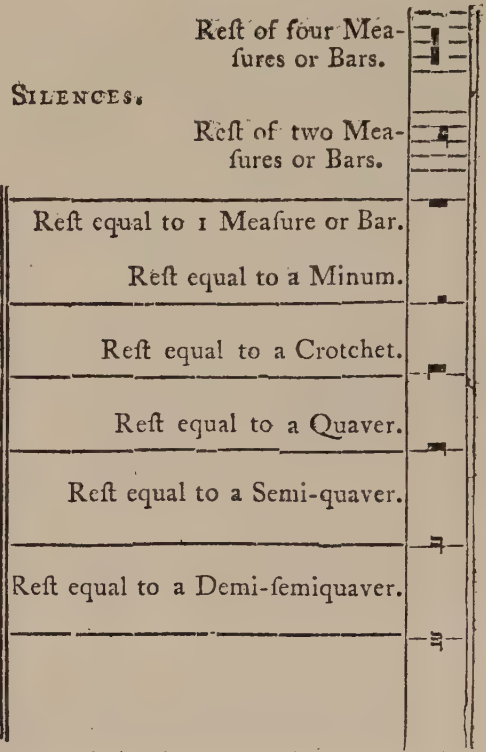
EQUAL

EQUAL POWERS. C R

## MODERN POWERS.




## SILENCES.


Reſt of four Meaſures or Bars.
Reſt of two Meaſures or Bars.
Reſt equal to 1 Meaſure or Bar.
Reſt equal to a Minum.
Reſt equal to a Crotchet.
Reſt equal to a Quaver.
Reſt equal to a Semi-quaver.
Reſt equal to a Demi-ſemiquaver.

CROWDED, A crowded genus, πυκνὸς, is according to the definition of Ariſtoxenes, that wherein in every tetrachord, the ſum of the two firſt intervals is leſs than the third. For this reaſon, the harmonic kind is crowded, becauſe the two firſt intervals, which are each of a quarter tone, form no more than a ſemi-tone together, a ſum much leſs than the third interval, which is a major third. The chromatic is alſo of the crowded kind, for theſe two firſt intervals form but one tone, leſs even than the minor third which follows. But the diatonic is by no means crowded, ſince its two firſt intervals form a tone and an half, a ſum greater than the tone which follows. (Vide GENUS, TETRACHORD.)

From this term πυκνὸς, as radical, are compoſed the words Apycni, Barypicni, Meſopycni, Oxypycni, each of which articles will be found in its place. This determination is no longer in uſe in the modern muſic.

TO CYPHER, Is writing on the notes of the baſs, cyphers or other characters, denoting the concords that theſe notes ſhould bear, to ſerve as a guide to the accompaniſt. (Vide CYPHERS, CONCORD.)

CYPHERS, Characters which are placed above or below the notes of the baſs to denote the concords which they ought to bear. Though amongſt theſe characters there are many which are not cyphers, this name has been generally given to them becauſe that is the ſort of ſigns which is moſt commonly preſented to our view.

As every concord is compoſed of many ſounds, if it had been neceſſary to expreſs each of theſe ſounds by a cypher, the cyphers would have been ſo multiplied and confuſed, that the accompaniſt could never have found time to read them at the inſtant of the execution. Application has therefore been made as much as poſſible to characterize each concord by a cypher, ſo that this cypher may ſuffice to ſpecify, in relation to the baſs, the nature of the concord, and conſequently all the ſounds which are to compoſe it. There is even a concord which is cyphered without a cypher; for, according to the preciſion of the cyphers, every note which is not cyphered, either bears no concord, or the perfect chord.

The cypher which denotes each concord, is generally that which anſwers to the name of the concord; wherefore the concord of tne ſecond is cyphered by 2, the ſeventh by 7, and the ſixth by 6, &c. &c. There are concords which bear a double name, and which are alſo expreſſed by a double cypher, ſuch are the concords of ſixth fourth, ſixth fifth, of ſeventh and ſixth, &c. Sometimes even three are placed, which occaſions that inconvenience which we would with to avoid, but as the compo-

fition of cyphers is derived from time and chance, rather than from reflecting ſtudy, it is not ſtrange that it is not free from fault and contradictions.

I have compoſed a table of all the cyphers practiſed in the accompaniment, in which it muſt be obſerved, that there are many concords which are differently cyphered in different countries, or in the ſame country by different authors, and even ſometimes by the ſame. I have given the various methods, ſo that every one may chuſe what appears cleareſt to himſelf; for cyphering and accompanying, connect each cypher to the ſuitable concord, according to the method of the author's cyphering.

## GENERAL TABLE

### OF ALL THE

## CYPHERS of the ACCOMPANIMENT.

*N. B.* An Aſteriſk as added to thoſe which are moſt uſed at preſent in France.

| Cyphers. | Names of Concords. |
|---|---|
| ✱ . . | Perfect Concord. |
| 8 . . | Idem. |
| 5 . . | Idem. |
| 3 . . | Idem. |
| 5 / 3 . | Idem. |
| 3 ♭ . | Perfect Concord. Third Minor. |
| ♭ 3 . | Idem. |
| ✱ ♭ . | Idem. |
| 5 / ♭ . | Idem. |
| 3 ♯ . | Perfect Concord Major Third. |
| ♯ 3 . | Idem. |
| ✱ ♯ . | Idem. |
| 5 / ♯ . | Idem. |
| 3 ♮ . | Perfect Concord Natural Third. |
| ♮ 3 . | Idem. |
| ✱ ♮ . | Idem. |
| 5 / ♮ . | Idem. |
| 6 / 3 . . | Concord of Sixth. |
| ✱ 6 . . | Idem. The different Sixths in this Concord are marked accidentally with the Cypher, as the Thirds in the perfect Concord. |
| ✱6 / 4 . | Concord of Sixth Fourth |
| 6 . . | Idem. |
| 7 / 5 / 3 . | Concord of Seventh. |

| Cyphers. | Names of Concords. |
|---|---|
| 7 / 5 | Idem. |
| 7 / 3 | Idem. |
| ✱ 7 . . | Idem. |
| ✱ 7 / ♮ | Seventh with Major Third. |
| ✱ 7 / ♭ | With minor Third. |
| ✱ 7 / ♮ | With natural Third. |
| 7♭ . | Concord of Minor Seventh. |
| ✱♭ 7 . | Idem. |
| 7♮ . | Concord of Major Seventh. |
| ✱♮ 7 . | Idem. |
| 7 ♮ . | Of natural Seventh. |
| ✱♮ 7 . | Idem. |
| ✱ 7 / 5 . | Seventh with falſe Fifth. |
| 7 / 5♭ . | Idem. |
| ✱ 7 . | Diminiſhed Seventh. |
| 7 ♭ . | Idem. |
| ♭ 7 . . | Idem. |
| 7♭ / 5 . | Idem. |
| 7♭ / 5♭ . | Idem. |
| ♭7 / 5 . | Idem. |
| ♭7 / ♭5 . | Idem. |
| 7♭ / 5♭ / 3 . | Idem. |
| | &c. |
| ✱♮7 . | Superfluous Seventh. |
| 7♮ . | Idem. |
| 7 . . | Idem. |
| 7 / 2 . | Idem. |

| Cyphers. | Names of Concord |
|---|---|
| 7♮ / 4 / 2 . | Idem. |
| ♮7 / 5 / 4 / 2 . | Idem. |
| | &c. |
| 7♮ / 6♭ . | Superfluous Seventh, with minor Sixth. |
| ✱x7 / ♭6 . | Idem. |
| x7 / 6♭ / 2 . | Idem. |
| x7 / 6 / 4 . | Idem. |
| | &c. |
| ✱7 / 2 . | Seventh and Second. |
| ✱6 / 5 . | Greater Sixth. |
| 6 . . | Idem. |
| ✱5 . . | Falſe Fifth. |
| 5♭ . | Idem. |
| ♭5 . . | Idem. |
| 6 / ♭5 . | Idem. |
| 6 / 5 . | Idem. |
| ♯ / ♮ . | Falſe Fifth and major Sixth. |
| ✱x6 / ♮ | Idem. |
| x6 / ♭5 . | Idem. |
| 6♮ / 5♭ | Idem. |
| 4 / 3 . | Smaller Sixth. |
| 6 / 4 / 3 . | Idem. |
| ✱♯ . . | Idem. |

| Cyphers. | Names of Concords. |
|---|---|
| 6 | Idem. |
| x6 | Idem major. |
| x6<br>4<br>3 | Idem. |
| | &c. |
| ✱x6 | Smaller superfluous Sixth. |
| x6<br>4<br>3 | Idem. |
| x6 | Idem. |
| x6<br>5<br>3 | Idem with the Fifth. |
| x6<br>5 | Idem. |
| 6<br>4<br>3 | Smaller Sixth, with superfluous Fourth. |
| 6<br>x4<br>3 | Idem. |
| 6<br>✱x4 | Idem. |
| x4<br>3 | Idem. |
| ✱2 | Concord of the Second. |
| 4<br>2 | Idem. |
| 6<br>2 | Idem. |
| ✱5<br>2 | Second and Fifth. |
| 6<br>4 | Triton. |
| 6<br>4x | Idem. |
| 6<br>x4 | Idem. |
| 6<br>♯ | Idem. |

| Cyphers. | Names of Concords. |
|---|---|
| 6<br>4<br>2 | Idem. |
| 4<br>2 | Idem. |
| 4x<br>2 | Idem. |
| x4<br>2 | Idem. |
| 4x | Idem. |
| ✱x4 | Idem. |
| ♯ | Idem. |
| 4x<br>3♭ | Triton with minor Third. |
| ✱♯<br>♭ | Idem. |
| 6<br>4<br>3♭ | Idem. |
| ✱x4 | Idem. |
| ✱x2 | Superfluous Second. |
| x4<br>x2 | Idem. |
| ♯<br>♯ | Idem. |
| 6<br>4<br>♯ | Idem. |
| | &c. |
| ✱9 | Concord of the Ninth. |
| 9<br>5 | Idem. |
| 9<br>3 | Idem. |
| ✱9<br>7 | Ninth with Seventh. |
| 9<br>7<br>5 | Idem. |
| ✱4 | Fourth or Eleventh. |
| 5<br>4 | Idem. |

| Cyphers. | Names of Concords. |
|---|---|
| *4 9 | Fourth and Ninth. |
| *4 7 | Seventh and Fourth. |
| *x5 | Superfluous Fifth. |
| 5x | Idem. |
| x5 9 | Idem. |
| x5 9 7 | Idem. |
| *x5 ♭4 | Superfluous Fifth and Fourth. |
| 5x 4♭ | Idem. |
| *7 6 | Seventh and Sixth. |
| *9 6 | Ninth and Sixth. |

End of the Table of Cyphers.

Some authors had introduced a cuſtom of covering with a ſtroke, all the notes of the baſs which paſſed under the ſame concord: In this manner, the pleaſing cantatas of Monſ. Clerambault are cyphered, but this invention was of too much utility to continue; it ſhewed alſo, too clearly to the eye, all the ſyncopes of harmony. At preſent, when the ſame concord is ſuſtained on four different notes of the baſs, there are four different cyphers which they are obliged to bear, ſo that the accompaniſt, led into an error, is haſtening even to ſeek the concord which he has under his hand. But it is the faſhion in France to load the baſs with a confuſion of uſeleſs cyphers; every thing is cyphered, even to the moſt evident concords: and he who places the greateſt number of cyphers is reckoned the moſt ingenious. A baſs thus confuſed with trivial cyphers retards the accompaniſt, and often makes him neglect the neceſſary cyphers.

The author, I think, muſt ſuppoſe, that the accompaniſt knows the elements of accompaniment, that he knows how to place a ſixth on a mediant, a falſe fifth on a ſenſible note, a ſeventh on a dominant, &c. he ſhould not therefore cypher theſe evident concords, unleſs that it be neceſſary to announce a change of the tone. The cyphers are made only to determine the choice of the harmony in dubious caſes, or the choice of ſounds in the concords which ought not to be filled: otherwiſe it is very well to have cyphered baſſes for ſcholars only. Cyphers muſt ſhew them the application of the rules; as for the maſters, it is ſufficient to ſpecify the exceptions.

Monſ. Rameau, in his Diſſertation on the different Methods of Accompaniment, has diſcovered a number of faults in the eſtabliſhed cyphers.—He has ſhewn, that they are too numerous, and, moreover, inſufficient, obſcure, and equivocal; that they multiply concords uſeleſſly, and that they diſcover no kind of union.

All theſe errors come from having been deſirous of connecting the cyphers to the arbitrary notes of the thorough baſs, inſtead of connecting them immediately to the fundamental harmony. The thorough baſs forms, without a doubt, a part of the harmony, but not the foundation: this harmony is independent of the notes of that baſs, and has its determined progreſs, to which the baſs itſelf ought to ſubject its direction. By making the concords and cyphers, which vary them from the notes of the baſs and their different directions, dependent, we ſhew only the combinations of the harmony inſtead of their baſs; we infinitely multiply the ſame number of fundamental concords, and oblige, in ſome reſpects, the accompaniſt to loſe ſight of the true harmonic ſucceſſion every inſtant.

After having made ſome excellent obſervations on the mechaniſm of the fingers in practiſing the accompaniment, M. Rameau propoſes ſubſtituting more ſimple cyphers in the place of ours, which render this accompaniment independent of the thorough baſs; ſo that, without any attention to this baſs, and even without ſeeing it, we could accompany on the cyphers alone with more preciſion than by the method eſtabliſhed with the concurrence of the baſs and cyphers.

All the cyphers invented by Monſ. Rameau denote two things. 1ſt. The fundamental harmony in perfect concords, which have no other neceſſary ſucceſſion, but which always conſtitute the tone. 2dly. The harmonic ſucceſſion determined by the regular direction of the fingers in the diſſonances.

All this is done by means of ſeven cyphers only. I. One letter of the gamut denotes the tone, the tonic, and its concord. If we paſs from a perfect concord to another, the tone is changed, a new letter is then made uſe of. II. To paſs from the tonic to a different concord, Monſ. Rameau admits but ſix methods, to each of which he aſſigns a particular character, that is to ſay,

1. An X for the ſenſible concord; for the diminiſhed ſeventh it is ſufficient to add a B flat under that X.
2. A 2 for the concord of the ſecond in the tonic.
3. A 7 for the concord of the ſeventh.
4. This abbreviation aj for the ſixth added.
5. Theſe two cyphers $\frac{4}{3}$ relative to this tonic for the concord

which

which he calls of third-fourth, and which anſwers to the concord of the ninth on the ſecond note.

6. Laſtly, this cypher 4 for the concord of fourth and fifth on the dominant.

III. A diſſonant accord is followed by a perfect concord, or another diſſonant accord: In the firſt caſe, the concord is ſpecified by a letter; the ſecond is applied to the mechaniſm of the fingers. 'Tis one, two, or three fingers which ought to deſcend diatonically.

This is ſhewn by as many points, one on the other, as the number of fingers which ſhould deſcend. The dieſis's or B's flat which ſhould be made are known by the tone, or ſubſtituted in the cyphers correſpondent to the points; or indeed, in the chromatic or harmonic they are ſpecified by a ſmall line inclining in its deſcent or aſcent, after the ſign of a known note, to denote that it ſhould deſcend or riſe a ſemitone. By this means the whole is foreſeen, and this ſmall number of ſigns is ſufficient to expreſs the fineſt harmony poſſible.

It is eaſily ſeen, that we muſt here ſuppoſe every diſſonance to be prevented in deſcending; for if there were any which could be prevented in aſcending, if there were aſcendant directions of the fingers in diſſonant accords, the points of M. Rameau could not anſwer their purpoſe.

How ſimple ſoever this method may be, how favourable ſoever for practice, it has had no ſucceſs. It might perhaps be thought, that Monſ. Rameau's cyphers, corrected one error only to ſubſtitute another; for if he ſimplifies the ſigns, and diminiſhes the number of concords, he not only does not expreſs the true fundamental harmony, but, moreover, he makes thoſe ſigns ſo much dependent on each other, that if we ſhould chance to err or loſe ourſelves a moment, to take perhaps one finger for another, we are irrecoverably loſt; the points are no longer ſignificant, and there is more room for entering upon a freſh perfect concord. But with ſo many preferable reaſons, ſhould there not be other objections to cauſe M. Rameau's method to be rejected? It was new; it was propoſed by a man whoſe abilities were ſuperior to thoſe of all his rivals: This was the cauſe of its condemnation.

# D.

D. This letter in French muſic ſignifies the ſame thing as P in the Italian; that is to ſay, Sweet. The Italians uſe it alſo ſometimes for the term dolce, and this word dolce is not only an oppoſition to forte, but to rude alſo.

D. C. Vide DA CAPO.

D LA RE, D SOL RE, or ſimply D, The ſecond note of the natural or diatonic gamut, which is indifferently called Re. (Vide GAMUT.)

DA CAPO, Theſe two Italian words are frequently found written at the end of airs in rondeau, ſometimes at full length, and often abridged by theſe two letters D. C. They ſpecify that when the ſecond part of the air is finiſhed, we muſt take up the beginning as far as the final point. Now and then we muſt not return to the beginning entirely, but to a ſpecified place. In that caſe, inſtead of the words Da Capo, we find theſe written, Al Segno.

DACTYLIC, A name given in ancient muſic to that kind of rhyme whoſe meaſure was divided into two equal times. (Vide RHYME.)

A kind of ode, wherein this rhyme was frequently uſed, was alſo ſtiled dactylic, ſuch as the Harmathian and Orthian odes.

Julius Pollius ſeems to make a doubt whether the dactylic was a kind of inſtrument or an air, a doubt, which is however, confirmed by what Ariſtides Quintilian ſays of it in his ſecond book; and which cannot be reſolved but by ſuppoſing that the word dactylic ſignified, at the ſame time, an inſtrument and an air, as ſeveral words with us.

DECAMERIDES, The name of one of the elements in Monſ. Sauveur's Syſtem, which may be ſeen in the Memoirs of the Academy of Sciences, A. D. 1701.

To form a general ſyſtem, which might afford the beſt temperament, and be adjuſted to every ſyſtem, this author, after having divided the octave into 43 parts, which he calls merides, and ſub-divided each mende into 7 parts called Eptamerides, divides again each eptameride into two other parts, to which he gives the name of decamerides. The octave is by this means divided into 3010 parts, by the which we may expreſs, without any perceptible error, the connections of all the intervals in muſic.—This word is formed from δέκα, ten, and μέρις a part.

DASH, A term in church-muſic, denoting the pſalm, or pſalmody of a pſalm, or ſome ſtaves of the pſalm, drawn and lengthened on a mournful air, ſubſtituted on ſome occaſions in

lieu

lieu of the joyous airs of the Hallelujah, &c. &c. An air with daſhes ſhould be compoſed in the ſecond or eighth tone. The reſt are not ſuitable to it.

DASH TRACTUS, Is alſo the name of an ancient figure of a note, called alſo Plica.

DECLAMATION, In muſic, is the art of rendering a grammatical and oratorical accent, by the inflexions and number of the melody. (Vide ACCENT, RECITATIVE.)

DEDUTTIONE, A collection of notes aſcending diatonically, or by conjoint degrees. This term is in uſe only in church muſic.

DEGREE, The difference of poſition or elevation which is found between two notes placed in the ſame direction. On the ſame line, or in the ſame ſpace, they are in the ſame degree, and they would be ſo ſtill, though one of the two be raiſed or lowered a ſemi-tone by a dieſis or B flat. On the contrary, they might be in uniſon, though placed on different degrees; as the ut B flat, and the ſi natural; the fa dieſis, and the ſol B flat, &c.

If two notes follow each other diatonically, ſo that one being on a line, the other is in the adjoining ſpace, the interval is of one degree; of two, if they are in a third; of three, if in a fourth; of ſeven, if in the octave, &c.

Thus, by taking away one of the number expreſſed by the name of the interval, we always have the number of the diatonic degrees, which ſeparate the two notes.

Theſe diatonic degrees, or degrees ſimply, are alſo called conjoint degrees, in oppoſition to disjoint degrees, which are compoſed of many degrees conjoined. For inſtance, the interval of the ſecond is a conjoin'd degree; but that of the third is diſjoint, compoſed of two conjoint degrees; and in the ſame manner with the reſt. (Vide CONJOINT, DISJOINT, INTERVAL.)

DEMI JEU, A DEMI JEU, or ſimply A DEMI, A term of inſtrumental muſic, which anſwers to the Italian ſotto voce, or mezza voce, or mezzo forte, and which expreſſes a method of playing which holds a medium between the forte and dolce.

DEMI MEASURE, A ſpace of time which equals the duration of a meaſure. There are properly demi-meaſures in thoſe meaſures only whoſe times are in equal number; for in a three-timed meaſure, the firſt demi-meaſure begins with a tempo forte, and the ſecond in contrary time, which renders them unequal.

DEMI MINIME REST, A character of muſic denoting a ſilence, the duration of which is equal to that of a demi-crotchet, or the half of a minime.

DEMI

DEMI PAUSE, A character of muſic, which expreſſes a ſilence, whoſe duration ſhould be equal to that of a four timed demi-meaſure, or of a minum. As there are meaſures of different powers, and as that of the demi-pauſe has no variation, it is equal to the half of a meaſure, only when the entire meaſure is equal to a ſemi-breve, the difference of the entire pauſe excepted, which is always exactly equal to a meaſure, great or ſmall. (Vide PAUSE.)

DEMI TIME, A power which is of exact duration with the half of a time. What I have ſaid in regard to time, muſt be applied to the demi-time, when I ſpoke of the demi-meaſure in regard to meaſure.

DEMI TONE, An interval of muſic, nearly equal to the half of a tone, and which is more commonly ſtiled ſemi-tone. (Vide SEMI-TONE.)

TO DESCEND, Is to lower the voice *vocem remettere*, that is, to make the ſounds ſucceed from ſharp to flat, or from high to low. This is preſented to the eye by our method of pricking the notes.

DESIGN, Is the invention and conduct of a ſubject, the diſpoſition of each part, and the general direction of the whole.

It is not ſufficient to compoſe beautiful airs and a pleaſing harmony. All this muſt be conjoined by a principal ſubject, to which all the parts of the work muſt be connected, and by which it may become one. Thus unity ſhould reign in every air, in the movement, the character, the harmony, and modulation. The whole muſt have reference to one general idea, which unites it. The difficulty is to unite theſe precepts with an elegant variety, without which, the whole becomes fatiguing. Doubtleſs, the muſician, as well as the poet and painter, dares every thing in favour of this charming variety, provided, that under pretext of contraſting, we have not, for a well conducted work, ſome broken, murdered muſic given us, compoſed of ſhattered pieces, the connection of which make a complete oppoſition ———

Non ut placidis coeant immitia, non ut
Serpentes avibus geminentur, tigribus agni.———

'Tis therefore in a well extended diſtribution, in a juſt proportion between all the parts, that the perfection of the deſign conſiſts; and 'tis particularly in this point, that the immortal Pergoleſis has diſcovered his judgment, taſte, and left all his rivals at ſuch a diſtance behind him.—His Stabat Mater, his Orpheus, his Serva Padrona, in three different kinds, are three complete Chef d'Oeuvres, equally excellent in their deſign.

This idea of the general deſign of a work is alſo ſeparately applied to each part, which compoſes it. So we deſign an air,

a duo, trio, &c. &c. For this purpoſe, after having fixed on a ſubject, we lay it out, according to the rules of a good modulation, into every part wherein it ſhould be extended, with ſo exact a proportion, as not to be effaced from the mind of the audience, and ſtill never to preſent itſelf to their ear, but with all the graceful beauties of novelty. 'Tis a fault in the deſign to ſuffer the ſubject to be forgotten, and a much greater to continue it till it becomes diſguſting.

TO DESIGN, To form the deſign of a piece or an air in muſic. (Vide DESIGN.) "Such a compoſer deſigns his works ill." "This choir is ſhockingly deſigned."

DESCANT, An ancient term, by which was ſpecified what has been ſince called counter point. (Vide COUNTER POINT.)

DESK, A ſtructure in the choir, on which were placed the muſic books in the catholic churches.

DETACHED, uſed ſubſtantively, A kind of execution, by which, inſtead of ſuſtaining the notes in the duration of their whole powers, we ſeparate them by ſilences taken on the ſame powers. The *Detatched*, entirely dry and ſhort, is marked on the notes by lengthened points.

DIACOMMATIC, A name given by Monſ. Serre to a kind of fourth genus, which conſiſts in certain harmonic tranſitions, by which the ſame note continuing apparently on the ſame degree, aſcends or falls a comma in paſſing from one concord to another, with which we ſeem to form an union.

For inſtance, on this paſſage of the baſs $\overset{32}{fa}\ \overset{27}{re}$ in the major mode of ut, the $\overset{80}{la}$, major third of the firſt note, remains to become the fifth of re; moreover the true fifth of $\overset{27}{re}$ or of $\overset{54}{re}$ is not $\overset{80}{la}$ but $\overset{81}{la}$: wherefore the muſician who tunes the la ſhould naturally give it the two conſecutive intonations $\overset{80}{la}\ \overset{81}{la}$, which differ by a comma.

In the ſame manner, in an air called la Folie d'Eſpagne, in the third time of the third meaſure, one muſt imagine that the tonic $\overset{80}{re}$ aſcends a comma to form the ſecond $\overset{81}{re}$ of the major mode of ut, which is explained in the following meaſure, and is found ſuddenly conducted by this muſical paralogiſm, and double uſe of the re.

We muſt obſerve, that to paſs briſkly from the minor mode of la to that of ut major, the concord of diminiſhed ſeventh is changed ſol dieſis, ſi, re, fa, into the concord of the ſimple ſeventh, ſol, ſi, re, fa. The chromatic movement of the ſol dieſis in oppoſition to the natural ſol, is much the moſt ſenſible, but

that is not the only one. The re aſcends alſo by a diacommatic movement from re to re, tho' the notes ſuppoſes it permanent on the ſame degree.

We may find a great number of examples of this diacommatic genus, particularly when the modulation paſſes ſuddenly from the major to the minor, or the minor to the major: It is chiefly in the adagios, adds Monſ. Serre, that excellent maſters, tho' principally guided by ſentiment, make uſe of this kind of tranſition, ſo neceſſary to give the modulation an appearance of indeciſion, whoſe effects the ear and ſentiment often approve, as they are by no means equivocal.

DIACOUSTIC, Is a ſearch for the proprieties of a ſound, broken by paſſing acroſs different middles, i. e. from a condenſe to a more rarified, and ſo vice verſa. As viſual rays direct more eaſily than ſounds by lines on certain points, ſo the experience of the diacouſtic is infinitely more difficult than that of the dioptric.

This word is formed from the Greek διὰ through, & ἀκούω, to hear. (Vide SOUND.)

DIAGRAM, This was, in the ancient muſic, the table or model which preſented to the eye a general extent of all the ſounds of a ſyſtem, and what we call at preſent Scale, Gamut, Keys. (Vide thoſe words.)

DIALOGUE, A compoſition for two voices or inſtruments, which anſwer to each other, and often reunite. The greateſt part of ſcenes in an opera, are in this ſenſe dialogues, and the Italian duo's are ſo always; but this word is more particularly applied to the organ. 'Tis on this inſtrument that an organiſt plays dialogues, by anſwering in different tunes, or on different keys.

DIAPASON, A term in ancient muſic, by which the Greeks expreſſed the interval or conſonance of the octave. (Vide OCTAVE.)

The muſical inſtrument-makers call, at preſent, diapaſons, certain tables, wherein are marked the meaſures of theſe inſtruments, and of all their parts.

We call alſo diapaſon, a ſuitable extent for a voice or an inſtrument. Wherefore when a voice is raiſed to a great height, we ſay, that it goes out of the diapaſon; and we ſay the ſame of an inſtrument, whoſe chords are too looſe or too tight, which render but a little ſound, or a ſound very diſagreeable, becauſe its tone is either too high or too low.

This word is formed from διὰ through, and πᾶσον, all, becauſe the octave comprehends all the notes of the perfect ſyſtem.

DIAPENTE, A name given by the Greeks to the interval which

which we now call Fifth, and which is the ſecond of the conſonances. (Vide CONSONANCE, INTERVAL, FIFTH.)

This word is formed from διὰ, by and πέντε, five, becauſe by going through this interval diatonically, we find five different ſounds pronounced.

DIAPENTISSARE, A barbarous word uſed by Muris, and other ancient muſicians.

It was a method of proceeding in the deſcant or counter-point, by fifths rather than fourths. Muris differts extenſively on the proper art, and convenient rules for this branch.

DIAPHONY, A name given by the Greeks to every interval or diſſonance, becauſe the two ſounds contradicting each other mutually, are divided, and make their difference appear very diſagreeably.

Guy Aretin gives alſo the name of diaphony to what has been ſince called deſcant, on account of the two parts which are therein diſtinguiſhed.

DIAPTOSE, An inter-cadence or leſſer fall. 'Tis in church-muſic a kind of Perieleſis, or paſſage, which is formed on the laſt note of an air, generally after a greater interval in aſcending. In that caſe, to certify the juſtneſs of this finale, it is twice marked, by ſeparating that repetition by a third note, which is lowered by a degree, after the method of a ſenſible note, as ut ſi ut, or mi re mi.

DIASCHISMA, Is, in ancient muſic, an interval forming the half of a minor ſemi-tone. The reference is from 24 to $\sqrt[2]{600}$, and conſequently irrational.

DIASTEME, This word, in ancient muſic, ſignifies properly interval, and is the name given by the Greeks to the ſimple interval, in oppoſition to the compounded interval, which is called ſyſtem. (Vide INTERVAL, SYSTEM.)

DIATESSARON, A name given by the Greeks to the interval which we call Fourth, and which is the Third of the conſonances. (Vide CONSONANCE, INTERVAL, FOURTH.)

DIATESSERONARE, Was, amongſt our ancient muſicians, a method of proceeding in the deſcant or counterpoint, rather by fourths than fifths.

The word is compounded of διὰ, by, and τέσσαρες, four, becauſe in going diatonically over the interval, we pronounce four different ſounds.

DIATONIC, The diatonic genus is that of the three which proceeds by major tones and ſemi-tones, according to the natural diviſion of the gamut; that is, that whoſe leaſt interval is of a conjoint degree, which does not prevent the parts from proceeding by greater intervals, provided they are all taken on diatonic degrees.

This word is derived from the Greek διὰ, by, and τόνος, the tone; that is, paſſing from one tone to another.

The diatonic genus of the Greeks reſulted from one of the three principal rules which were eſtabliſhed for the concordance of the tetrachords.—This genus was divided into many different kinds, according to the different connections, into which the interval could be divided which determined them, as this interval could not be confined below a certain point without changing its genus. Theſe different variations from the ſame genus were called χροὰς colours, by Ptolemy. who diſtinguiſhes ſix of them, but the only one uſed in practice, was that called diatonic-ditonic, whoſe tetrachord was compoſed of a weak ſemitone, and of two major tones. Ariſtoxenes divides this ſame genus into only two kinds, viz. the tender or flat diatonic, and the ſyſtonic or ſharp. This latter anſwers to the ditonic of Ptolemy. (Vide The Connections of one with the other.)

According to Ariſtoxenes.

The tetrachord being ſuppoſed divided into 60 equal parts.

D I A T O N I C.

Tender or Flat —— 12 + 18 + 30 = 60.
Syntonic or Sharp —— 12 + 24 + 24 = 60.

C H R O M A T I C.

Flat —— 8 + 8 + 44 = 60.
Hemiolian 9 + 9 + 42 = 60.
Tonic —— 12 + 12 + 36 = 60.

E N H A R M O N I C.

6 + 6 + 48 = 60.

According to Ptolemy.

The tetrachord being repreſented by the reference of its two terms.

D I A T O N I C.

Ditonic $\frac{256}{243} + \frac{9}{8} + \frac{9}{8} = \frac{4}{3}$

C H R O M A T I C.

Flat —— $\frac{28}{27} + \frac{15}{14} + \frac{6}{5} = \frac{4}{3}$

Intenſe, or, Syntonic $\frac{22}{21} + \frac{12}{11} + \frac{7}{6} = \frac{4}{3}$

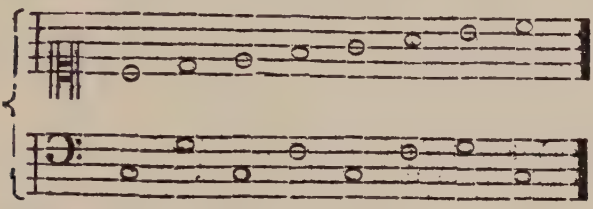
E N H A R M O N I C.

$\frac{45}{45} + \frac{24}{23} + \frac{5}{4} = \frac{4}{5}$

The

The modern diatonic genus reſults from the conſonant direction of the baſs on the chords of a ſimilar mode.

Fundamental and regular Baſs of the Scale diatonically aſcending by the natural Succeſſion of the *three Cadences*.



Its references have been fixed by the uſe of the ſame chords in different tones, ſo that, if the harmony has at firſt lain down the diatonic ſcale, 'tis the modulation which has modified it, and this ſcale, ſuch as it is at preſent, is neither exact in regard to the air, or harmony, but only in regard to the method of employing the ſame ſounds in different uſes.

The diatonic genus is, without contradiction, the moſt natural of the three, ſince it is the only one which can be uſed without varying the tone. Its intonation alſo is incomparably more eaſy than that of the two others; and there is no doubt but that the firſt ſongs were compoſed in this kind; but we muſt obſerve, that, according to the laws of modulation, which permit and preſcribes even the paſſage from one tone to another, we have no pure diatonic in our muſic. Each particular tone, I will allow, in the diatonic, is good; but we cannot paſs from one to the other without ſome chromatic tranſition, at leaſt, an omiſſion of the harmony. The pure diatonic, in which no one of the ſounds is altered, either by the cleff or accidentally, is called, by Zarlin, diatono diatonic, and he gives the church-muſic as an example. If the cleff is numbered with a B flat, in that caſe, according to him, it is a flat diatonic, which muſt not be confounded with that of Ariſtoxenes. (Vide FLAT.) In regard to the tranſpoſition by dieſis, this author ſpeaks nothing of it, as it had not been practiſed in his time. Doubtleſs he would have given it the name of rough or ſharp diatonic, tho' there had even reſulted from it a minor mode, as that of E la mi, for in thoſe times, when they had not the harmonic ideas of what we call tones and modes, and where they had already loſt the other ſignifications which the ancients fixed to the ſame words, they paid a greater attention to the particular alterations of the notes than to the general connection which reſulted from it. (Vide TRANSPOSITION.)

DIATONIC SOUNDS or CHORDS. Euclid diſtinguiſhes under this name, amongſt the moveable ſounds, thoſe which do not partake of the greater genus, even in the chromatic and enharmonic. Theſe ſounds in each kind are five in number, i. e. the third of each tetrachord; and they are the ſame which other authors call apycni. (Vide APYCNI, GENUS, TETRACHORD.)

DIAZEUXIS, A Greek word which ſignifies diviſion, ſeparation, disjunction. 'Tis by this term that the tone which ſeparated two tetrachords disjoined, was called in ancient muſic, and which being added to one of the two, formed from it the diapente. It is our major tone, whoſe reference is from 8 to 9, and which in effect is the difference of the fifth and fourth.

The diazeuxis in their muſic was placed between the meſis and parameſis, that is to ſay, between the ſharpeſt tone of the ſecond tetrachord, and the flatteſt of the third, or otherwiſe between the note ſynnemenon, and the parameſis hyperboleon, i. e. between the third and fourth tetrachord, provided that the diſjunction was formed in the one or the other, for it could not be practiſed at once in the two

The homologous chords of the two tetrachords, between which there was a diazeuxis, ſounded the fifth, whereas they ſounded in fourth when they were conjoined.

DIESIS, Is, according to old Bacchius, the ſmalleſt interval of the ancient muſic. Zarlin ſays, that Philolaus, the Pythagorean, gave the name of dieſis to the limma; but he adds, a little farther, that the dieſis of Pythagoras is the difference between the limma and apotome. As to Ariſtoxenes, he divided the ton into two equal parts, without many variations, or in three or four. From this laſt diviſion reſulted the dieſis, enharmonic minor, or fourth of a tone; from the ſecond, the minor chromatic dieſis or third of a tone; and from the third, the major dieſis, which made exactly a demi-tone.

DIESIS, Amongſt the moderns, is not properly, as amongſt the ancients, an interval of muſic, but a ſign of that interval which ſpecifies that we muſt raiſe the ſound of the note, before which it is placed, above that which it ought naturally to have, without, however, making its degree or name undergo a change. Moreover, as this elevation may be made, at leaſt, three ways in the eſtabliſhed genera, ſo there are three ſorts of dieſis', viz.

Firſt, The enharmonic minor, or ſimple dieſis, whoſe form is like St. Andrews's Croſs, according to all our muſicians, who follow the practice of Ariſtoxenes, it raiſes the note the fourth of a tone; but properly it was only the exceſs of the ſemi-tone major on the ſemi-tone minor. Wherefore from the natural

natural mi to the fa B flat, there is an enharmonic dieſis, whoſe numerical powers are from 125 to 128.

Secondly, The chromatic dieſis, double or ordinary dieſis, marked by a double croſs, raiſes the note a ſemi-tone minor. This interval is equal to that of the B flat, i. e. the difference of the major to the minor ſemi-tone; wherefore, to aſcend from a tone beyond the natural mi, we muſt paſs to the fa dieſis. The reference of this dieſis is from 24 to 25. (Vide on this article an eſſential remark at the word ſemi-tone.)

Thirdly, The enharmonic major, or triple dieſis, marked by a triple croſs, raiſes, according to the Ariſtoxenians, the note about three fourths of a tone. Zarlin ſays, that it raiſes it a ſemi-tone minor, which cannot be underſtood of our ſemi-tone, ſince in that caſe, this dieſis would be exactly ſimilar to our chromatic dieſis.

Of theſe three dieſis', whoſe intervals were all practiſed in ancient muſic, there is only the chromatic which is uſed in ours; the intonation of the inharmonic dieſis' being to us an almoſt inſurmountable difficulty, and the uſe of them being alſo aboliſhed by our ſyſtem.

The dieſis, as well as the B flat, is always placed on the left, before the note which ought to bear it; and before or after a cypher, it ſignifies the ſame thing as before a note. (Vide CYPHERS.) The dieſis' which are intermixt with the cyphers of the thorough baſs, are often no more than ſimple croſſes, as the enharmonic dieſis: but this cannot cauſe an equivocation, ſince it is no longer in uſe.

There are two methods of making uſe of the dieſis. The one, accidental, when, in the courſe of the air, we place it on the left of a note. This note, in the major modes, is moſt generally found the fourth of the tone: In the minor modes, two accidental dieſis' are moſt commonly neceſſary, particularly in aſcending, i. e. one on the ſixth note, and another on the ſeventh. The accidental dieſis changes only the note which immediately follows, or, at the moſt, thoſe which in the ſame meaſure are placed on the ſame degree, and ſometimes in the octave, without any contrary ſign.

The other method is to make uſe of the dieſis in the cleff, and in that caſe it is carried thro' the whole continuance of the air, and on all the notes which are placed on the ſame degree, whereon is the dieſis, unleſs it is oppoſed by ſome B flat, or ſharp, or that the cleff has no changes.

The poſition of the dieſis' in the cleff is by no means arbitrary, no more than that of the B's flat; otherwiſe, the two

ſemi-tones of the octave would be ſubject to be found together out of the preſcribed intervals. We muſt then apply to the dieſis' a ſimilar reaſoning to that which we have made at the article B flat, and it will be found that the order of the dieſis' which is ſuitable to the cleff, is that of the following notes, beginning by fa, and aſcending ſucceſſively by fifths, or deſcending by fourths as far as the la, at which we generally ſtop, becauſe the dieſis of mi which would follow, does not differ at all from the fa on our ſcale.

Order of Dieſis' on the Cleff.

Fa, Ut, Sol, Re, La, &c. &c.

We muſt take notice, that a dieſis cannot be uſed in the cleff without uſing alſo thoſe which precede it; wherefore, the dieſis of ut is placed only with that of fa; that of ſol with the two preceding, &c. &c.

I have given, at the article Tranſpoſed cleff, a formula to find immediately if a tone or mode ought to bear dieſis' in the cleff, and how many.

Such is the acceptation of the word dieſis, and its uſe, in practice.

The moſt ancient manuſcript, wherein I have ſeen the ſign uſed, is that of Jean de Muris, which makes me imagine it might have been his invention. But it appears, in his examples, to have only the effect of B ſharp; and this author alſo gives the name of dieſis always to the major ſemi-tone.

In harmonic calculations, we call dieſis' certain intervals, greater than a comma, and leſs than a ſemi-tone, which make the difference of other intervals engendered by the progreſſions and references of the conſonances. There are three of theſe dieſis'. Firſt, The major dieſis, which is the difference between the major and minor ſemi-tone, and whoſe numerical powers are from 125 to 128. Secondly, The minor dieſis, which is the difference between the ſemi-tone minor and major dieſis, and in reference 3072 to 3125. Thirdly, The dieſis maxima, in numerical powers from 243 to 450, which is the difference of the minor tone and greater ſemi-tone.

It muſt be confeſſed, that ſo many different acceptations of the ſame word in the ſame art, are only a cauſe of frequent equivocations, and produce a continual confuſion of errors.

DIEZEUGMENON, A tetrachord diezeugmenon is the name which the Greeks gave their third tetrachord, when it was diſjoined from the ſecond. (Vide TETRACHORD.)

DIMINISH'D,

DIMINISH'D, A diminiſh'd interval is every minor interval, from which a ſemitone is taken by a dieſis to the inferior note, or by a B flat to the ſuperior. In regard to the juſt intervals, formed by perfect conſonances, when they are diminiſh'd a ſemitone, they ought not to be called diminiſh'd, but falſe; tho' it is often ſaid, mal-a-propos, a diminiſh'd fourth, inſtead of ſaying falſe fourth; and diminiſh'd octave, inſtead of ſaying falſe octave.

DIMINUTION, An old word, which ſignified the diviſion of a long note, as a minum, or crotchet, into many other ſmaller notes of leſſer powers. It was alſo underſtood, that this word expreſſed thoſe terms which we call by the denomination of trills or quavers. (Vide thoſe words.)

DIOXY, Is, with reference to Nicomachus, a name which the ancients gave ſometimes to the conſonance of the fifth, which they more generally called diapente. (Vide DIAPENTE.)

DIRECT, A direct interval is that which forms any kind of harmony on the fundamental ſound which produces it. Wherefore, the fifth, major third, and the octave, with their redditives, are rigorouſly the only direct intervals; but by extenſion, we call alſo direct intervals all the reſt, as well conſonant as diſſonant, which each part forms with the practiſed fundamental ſound, which ought to be below it. Wherefore, the minor interval is a direct interval on a concord in third minor, and in the ſame manner the ſeventh or ſixth added on the concord which bear their name.

A direct concord is that which has the fundamental ſound in ſharp, and whoſe parts are diſtributed, not according to the moſt natural order, but according to the moſt confined. Wherefore, the perfect direct concord is not octave, fifth, and third, but third, fifth, and octave.

DISCANT, This was, in our muſic, that kind of counterpoint which the ſuperior parts compos'd inſtantly, in ſinging extempore on the tenor or baſs, which forms ſome idea of the ſlowneſs with which the muſic ſhould be directed, to be executed in that manner by muſicians, as little ſkilful as thoſe of that time. "Diſcantant," ſays Jean de Muris, "qui ſimul cum "uno vel pluribus dulciter cantat, ut ex diſtinctis ſonis ſonus "unus fiat, non unitate ſimplicitatis, ſed dulcis concordiſque "mixtionis unione." After having explained what he means by conſonances, and the choice which is neceſſary to make between them, he finds fault ſharply with the ſingers of his time, who practiſed them almoſt indifferently. "With what audacity," ſays he, "if our rules are good, do thoſe dare compoſe "the diſcant, which have not the leaſt comprehenſion of the

" choice of concords, not the leaſt miſtruſt of thoſe which are " more or leſs concordant; who neither know from which they " ſhould abſtain, nor which they ſhould moſt frequently uſe; " neither in what place to employ them, nor any thing which " the practice of an art well underſtood requires? If they ſuc- " ceed, it is by chance. Their voices wander without rule on " the tenor, with which they are concordant, if fortune ſtands " their friend. They throw out their ſounds at hazard, as a " ſtone which an awkward hand aims at a mark, and which in " an hundred times may hit it perhaps once."

The good old Muris touches alſo theſe corrupters of pure and ſimple harmony, in which his age abounded equally with ours. —Heu, proh dolor! His temporibus aliqui ſuum defectum inepto proverbio colorare moliuntur. Iſte eſt, inquiunt novus diſcantandi modus, novis ſcilicet uti conſonantiis. Offendunt ii intellectum eorum, qui tales defectus agnoſcunt, offendunt ſenſum, nam inducere cum deberent delectationem, adducunt triſtitiam. O incongruum proverbium! O mala coloratio! Irrationabilis excuſatio! O magnus abuſus, magna ruditas, magna beſtialitas, ut aſinus ſumatur pro homine, capra pro leone, ovis pro piſce, ſerpens pro ſalmone! Sic enim concordiæ confunduntur cum diſcordiis ut nullatenus una diſtinguatur ab alia. O ſi antiqui periti muſicæ doctores tales audiſſent diſcantatores, quid dixiſſent? Quid feciſſent? Sic diſcantantem in creparent & dicerent. Non hunc diſcantum, quo uteris, de me ſumis. Nom tuum cantum unum & concordantem cum me facis. De quo te intromittis? Mihi non congruis, mihi adverſarius, ſcandalum tu mihi es: O utinam taceres! Non concordas, ſed deliras & diſcordas.

DISCORDANT, By this term is called every inſtrument which is played on and is not in concord, every voice which ſings falſe, every part which is not concordant with the reſt. An intonation which is not juſt, forms a falſe tone. A continuance of a whole falſe, forms a diſcordant air. This is the difference between theſe two words.

DISDIAPASON, A name given by the Greeks to the interval which we call double octave.

The diſdiapaſon is nearly of the greateſt extent which the human voice can arrive at without forcing itſelf. There are even very few who can ſound it fully. It is for this reaſon that the Greeks bounded each of their modes by this extent, and gave it the name of a perfect ſyſtem. (Vide Mode, Genus, System.)

DISJOINT, The Greeks gave the relative name of disjoint to two tetrachords, which immediately followed each other, whilſt the deepeſt chord of the ſharp was a tone above the ſharpeſt

ſharpeſt of the flat, inſtead of being ſimilar to it. Wherefore, the two tetrachords, hypaton and diazeugmenon, were disjoint; and the two, ſynnemenon and hyperbolean, were ſo alſo. (Vide TETRACHORD.)

Among us, the name of disjoint is given to the intervals which do not follow each other immediately, but are ſeparated by another interval: wherefore theſe two intervals ut mi and ſol ſi are disjoint. The degrees which are not conjoint, but which are compos'd of two or more conjoint degrees, are alſo called diſjoint degrees. Therefore each of theſe two intervals, of which I have ſpoken, forms a disjoint degree.

DISJUNCTION, Was, in ancient muſic, the ſpace which ſeparated the meſis and parameſis, or in general a tetrachord from one adjoining, when they were not conjoint. This ſpace was a tone, and was called in Greek diazeuxis.

DISSONANCE, Every ſound, which with another forms a concord diſagreeable to the ear, or in a more extenſive ſenſe, every interval which is not conſonant. Moreover, as there are no other conſonances, but which form between themſelves, and with the fundamental, the ſounds of the perfect concord, it follows thence, that every other interval is its true diſſonance. The ancients even counted as ſuch, the thirds and ſixths, which they cut off from the conſonant accords.

The term diſſonance is derived from two words, the one Greek, the other Latin, which ſignify a double ſound. In effect, what renders the diſſonance diſagreeable, is, that the ſounds which form it, far from uniting themſelves to the ear, ſtrike againſt each other, and are heard as two diſtinct ſounds, tho' ſtruck at the ſame time.

The name of interval is given ſometimes to the interval, and ſometimes to each of the two ſounds which form it. But tho' two ſounds are diſſonant between themſelves, the name of diſſonance is given more eſpecially to that of the two which is moſt remote from the concord.

There are an infinity of poſſible diſſonances: but as in muſic all the intervals are excluded, which the received ſyſtem does not furniſh, theſe are reduced to a ſmall number; alſo for practice, we ought to chooſe amongſt thoſe, only thoſe which anſwer to the genus and mode; and laſtly, to exclude from the laſt thoſe which cannot be uſed according to preſcribed rules. What are thoſe rules? Have they any natural foundation, or are they purely arbitrary? This is what I propoſe to examine in this article.

The phyſical principle of harmony is drawn from the production of the perfect concord, by the reſonance of any ſound.

All the conſonances ariſe from thence, and it is nature itſelf which furniſhes them. The diſſonance proceeds on a different plan, at leaſt, ſuch as we practice.

We allowedly find its generation in the progreſſions of conſonant intervals, and in their differences, but we cannot diſcover any phyſical reaſon which authoriſes us to introduce it in the body itſelf of harmony. P. Merſenne contents himſelf with ſhewing the generation by calculation, and the different connections of diſſonances, as well of thoſe which are rejected, as of thoſe added; but he mentions nothing of the laws for uſing them. Monſ. Rameau ſays in formal terms, that the diſſonance is not natural to harmony, and that it cannot be uſed therein without the aſſiſtance of art. However, in another work, he endeavours to find its principle by numerical powers, and harmonic and arithmetical proportions, as if there were any identity between the proprieties of the abſtracted quantity, and the ſenſations of hearing.

But after having waſted a quantity of analogies, after a number of metamorphoſes of theſe different proportions, the one within the other, after numerous operations, and uſeleſs calculations, he finiſhes, by eſtabliſhing, on trifling connections, that diſſonance which he gave himſelf ſuch unwearied pains only to diſcover. Wherefore, becauſe in the order of harmonic ſounds, the arithmetical proportion gives it by the lengths of the chords, a minor third in flat, (take notice that it gives it to the ſharp by the calculation of vibrations) he adds to the flat of the ſub-dominant a new minor third. The harmonic proportion gives it a minor third in ſharp, (it would give it to the flat by vibrations) and he adds to the ſharp of the dominant a freſh minor third. Theſe thirds added, do not, it is true, form any proportion with the preceding references: the references, which themſelves ought to have, are often changed; but that ſignifies little: Monſ. Rameau gives powers to every thing for the beſt. The proportion ſerves it to introduce the diſſonance, and the errors of the proportion to make it felt.

The illuſtrious geometrician, who has deigned to make the world acquainted with Monſ. Rameau's ſyſtem, having ſuppreſſed all theſe vain calculations, I ſhall follow his example, or will rather tranſcribe what he ſays concerning the diſſonance; and Monſ. Rameau will be indebted to me for having drawn this explanation from the elements of muſic, rather than from *his* writings.

It being ſuppoſed, that the eſſential chords of the tone, according to Monſ. Rameau's ſyſtem, are known, viz. in the tone of ut, the tonic ut, the dominant ſol, and the ſub-dominant fa,

we

we muſt alſo be acquainted, that this ſame tone of ut has the two chords ut and ſol common with the tone of ſol; and the two chords ut and fa, common with the tone of fa. Conſequently this direction of the baſs ut ſol may belong to the tone of ut, or to that of ſol; as the direction of the baſs fa ut, or ut fa, may appertain to the tone of ut, or to that of fa.

In that caſe, when we paſs from ut to fa, or to ſol, in a fundamental baſs, we are ſtill ignorant in what tone we are. It would be however ſerviceable to know it, and be able, by ſome method, to diſtingniſh the generator from its fifths.

We may gain this advantage by joining together the ſounds ſol and fa, in the ſame harmony, i. e. by joining to the harmony ſol ſi re of the fifth ſol, the other fifth fa, in this manner, ſol, ſi, re, fa; this fa added, being the ſeventh of ſol, forms a diſſonance; 'tis for that cauſe, that the concord ſol ſi re fa is called diſſonant concord, or concord of the ſeventh. It ſerves to diſtinguiſh the fifth ſol from the generator ut, which always bears, without mixture or alteration, the perfect concord ut mi ſol ut, given by nature herſelf. (Vide CONCORD, CONSONANCE, HARMONY.)

By this means, we ſee that when we paſs from ut to ſol, we paſs at the ſame time from ut to fa, becauſe the fa becomes, by this means, entirely determined, becauſe there is but this tone, to which the ſounds ſol and fa belong at the ſame time.

Let us now ſee continues, Monſ. D'Alembert, what we ſhould add to the harmony fa la ut, from the fifth fa, below the generator, to diſtinguiſh this harmony from that of the ſame generator. It ſeems then, that we ſhould add to it the other fifth ſol, for the purpoſe that the generator ut paſſing to fa, may paſs at the ſame time to ſol, and that the tone may be thereby determined; but this introduction of ſol in the concord of fa la ut would give two ſeconds following each other fa ſol, ſol la, that is to ſay, two diſſonances whoſe union would be too agreeable to the ear; an inconvenience which muſt be avoided; for if, to diſtinguiſh the tone, we alter the harmony of this fifth fa, we muſt alter it as little as poſſible. For this reaſon, inſtead of ſol, we will take its fifth re, which is the ſound neareſt to it, and we ſhall have for the ſub-dominant fa, the concord fa la ut re, which we call concord of greater ſixth, or ſixth added.

We may take notice here of the analogy which is obſerved between the concord of the dominant ſol, and that of the ſub-dominant fa. The dominant ſol, by aſcending above the generator, has a concord entirely compoſed of thirds in aſcending beyond ſol, ſol ſi re fa.

Moreover,

Moreover, the ſub-dominant fa, being below the generator ut, we ſhall find, in deſcending by ut towards fa, by thirds, ut la fa re, which contains the ſame ſounds as the concord fa la ut re gives to the ſub-dominant fa.

We moreover ſee, that the alteration of the harmony of the two fifths, conſiſts only in the minor third re fa, or fa re, added on each ſide to the harmony of theſe two fifths.

This explanation is ſo much the more ingenious, as it ſhews at once the origin, uſe, direction of the diſſonance, its neareſt connection with the tone, and the method of determining reciprocally the one by the other. The fault that I find in it, but an eſſential fault for making the whole glide, is the uſe of a chord unknown to the tone, as the eſſential chord of the tone; and this, by a falſe analogy, ſerving as a baſs to Monſ. Rameau's ſyſtem, deſtroys it, by rendering itſelf erroneous.

I ſpeak of that fifth below the tonic, of that ſub-dominant, between which and the tonic, there cannot be perceived the ſmalleſt union, which can authorize the uſe of this ſub-dominant, not only as an eſſential chord of the tone, but even in any ſenſe. In effect, what is there common between the reſonance, the ſhaking of the uniſon of ut, and the ſound of its fifth below? 'Tis by no means becauſe the entire chord is a fa, that its aliquots reſound at the ſound of ut, but becauſe it is a multiple of the chord ut; and there is no multiple of this ſame ut, which does not render a ſimilar phœnomenon. Take the ſeptuple, it will ſhake and reſound in its parts as well as the triple: Can it be ſaid, that the ſound of this ſeptuple, or its octaves, are the eſſential chords of the tone? Enough is ſaid, ſince it does not even form a commenſurable connection in notes with the tonic.

I know that Monſ. Rameau has pretended, that at the ſound of any chord, another chord in its twelfth below ſhook without reſounding; but, beſides its being a ſtrange phœnomenon in the acouſtic, that a ſonorous chord which ſhakes, does not reſound, it is however known, that this pretended experience is an error, that the ſharp chord ſhakes becauſe it divides itſelf, and that it appears not to reſound, becauſe it forms in its parts only the uniſon of the ſharp, which is not eaſily diſtinguiſhed.

Let Monſ. Rameau then tell us, that he takes the fifth below, becauſe he finds the fifth above; and that this playing with fifths appears to him convenient for the eſtabliſhment of his ſyſtem: We may congratulate him on his invention ſo very ingenious, but let him not authorize it with a chimerical experience; let him not torment himſelf to find, in the variations of harmonic and

and arithmetical proportions, the foundations of harmony, nor take the propriety of numbers for that of ſounds.

Take notice alſo, that if the counter-generation, which he ſuppoſes could have a place therein, the concord of the ſub-dominant fa, ſhould not, by any means, bear a major third, but a minor: becauſe the la Bemol is the true harmonic, which is

1 $\frac{1}{3}$ $\frac{1}{5}$

aſſigned to it by this change ut fa la ♭. So that according to this computation, the gamut of the major mode ought naturally to have the minor ſixth; but it has the major, as fourth fifth, or as fifth of the ſecond note, wherefore here is a ſecond contradiction.

Laſtly, take notice, that the fourth note given by the ſeries of aliquots, from whence ariſes the true natural diatonic, is by no means the octave of the pretended ſub-dominant, in the reference of 4 to 3, but another fourth note entirely different in the reference of 11 and 8, ſo that every theorician muſt perceive it clearly at firſt ſight.

I, however, appeal to the ear and experience of muſicians.—Let them but liſten to the rough and diſagreeable cadence imperfect of the ſub-dominant to the tonic, when compared with the ſelf-ſame cadence, in its natural place, which is from the tonic to the dominant. In the firſt caſe, can it be ſaid that the ear is ſatisfied after the concord of the tonic? Is it not in expectation of a continuance, or concluſion, at the time it really has it? Moreover, what is a tonic, after the which, the ear ſtill remains unſatisfied? Can it be looked on as a true tonic, and are we not in reality in the tone of fa, while we imagine ourſelves to be in that of ut? Let it be obſerved, how greatly the intonation of the fourth and the ſenſible note, as well aſcending as deſcending, appears ſtrange to the mode, and difficult to the voice. Tho' long cuſtom may have accuſtomed the ear and voice of the muſician to it, the difficulty of beginners to ſound this note ought to ſhew how very unnatural it is. This difficulty is attributed to the three conſecutive tones. Ought it not to be ſeen, that thoſe three conſecutive tones, as well as the note which introduces them, give a barbarous modulation, which has no foundation in nature? She certainly beſtowed a better guidance on the Greeks when ſhe made them finiſh their tetrachord preciſely at the mi of our ſcale, that is to ſay, at the note which precedes this fourth: They choſe rather to take this fourth below, and, by this means, they found by the ear alone, what all our harmonic theory has not rendered perceptible.

If the teſtimony of the ear, and that of reaſon unite, at leaſt in the ſyſtem given, to reject the pretended ſub-dominant, not only from the number of eſſential chords of the tone, but alſo from the number of ſounds which may enter into the ſcale of the mode, what becomes of all this theory of diſſonances? What of the explanation of the minor mode? and of the whole of Monſ. Rameau's ſyſtem?

Not being therefore able to perceive, either in phyſic or calculation, the real generation of the diſſonance, I ſought for it, an origin, purely mechanic; and 'tis in the following manner that I endeavoured to explain it in the encyclopœdia, without abſenting myſelf from Monſ. Rameau's practical ſyſtem.

I ſuppoſe the neceſſity of the known diſſonance. (Vide HARMONY, CADENCE.)

It now remains to ſee where that diſſonance ſhould be taken, and how uſed.

If we compare ſucceſſively all the ſounds of the diatonic ſcale with the fundamental ſound in each of the two modes, we ſhall find for a complete diſſonance the ſecond, and the ſeventh, which is no more than a varied ſecond, and which really forms a ſecond with the octave. That the ſeventh ſhould be varied from the ſecond, and not the ſecond from the ſeventh, is evident by the expreſſion of the references, for that of the ſecond 8. 9. being more ſimple than that of the ſeventh 9. 16. the interval which it repreſents, conſequently is not the generated, but the generator.

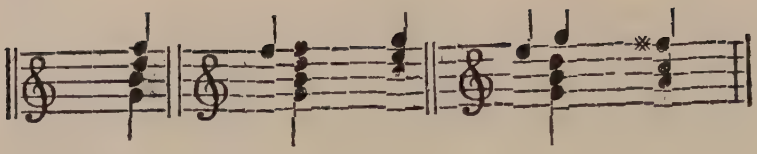
I allow that other altered intervals may become diſſonant, but unleſs it is therein expreſſed or underſtood, they are only accidents in the modulation, to which the harmony pays no reſpect, and theſe diſſonances, in that caſe, are not treated as ſuch. Wherefore, it is a certain thing, that where there is no ſecond, there is no diſſonance; and the ſecond is properly the only diſſonance that can be uſed.

To reduce all theſe conſonances to their ſmalleſt ſpace, we need not go out of the octave; they are all therein contained in the perfect concord. Let us then take this concord ſol ſi re ſol, and ſee in what part of that concord, which I as yet ſuppoſe in no tone, we may place a diſſonance, i. e. a ſecond, to render it as little diſguſtful to the ear as poſſible. On the la, between the ſol and the ſi, it would form a ſecond with each, and conſequently would be doubly diſſonant. It would be the ſame between the ſi and re, as between every interval of the third; let the interval of the fourth remain between the re and the ſol. Here we may introduce a ſound two ways. 1ſt. We may add the note fa, which will form a ſecond with ſol, and a third with re. 2dly. Or the note mi, which will form a ſecond with re, and a third with

with ſol. It is evident, that from each of theſe two ways, will be produced the leaſt rough diſſonance that can be, ſince it will not be diſcordant with any one ſound; and it will produce a new Third, which, as well as the two preceding, will contribute to the ſweetneſs of the whole concord. On one ſide we ſhall have the concord of the ſeventh, and on the other that of the ſixth added; the only two diſſonant accords admitted in the ſyſtem of the fundamental baſs.

It is not ſufficient to cauſe the diſſonance to be heard; it muſt be preſſed; you then diſguſt the ear only to flatter it afterwards more agreeably. Here are two joint ſounds, on one ſide the fifth and ſixth, and the other the ſeventh and the octave; as long as they will in this manner form the ſecond, they will continue diſſonant, but let the parts, which make them to be heard, be diſtant one degree; let the one aſcend, or the other deſcend diatonically, and the ſecond will on each ſide become a third; that is, one of the moſt agreeable conſonances. Wherefore, after ſol fa will be found ſol mi, or fa la; and after re mi, mi ut, or re fa; and this is what is called preventing the diſſonance.

It remains to be determined, which of the two joined ſounds ſhould aſcend or deſcend, and which ſhould continue as before; but the plan in determination ſtares us in the face. Let the fifth or the octave remain as principal chords, let the ſixth aſcend, and the ſeventh deſcend, as acceſſary ſounds and diſſonances. Moreover, if, of the two joined ſounds, that which has the leaſt compaſs to make, ſhould have the preference, the fa will again deſcend on the mi after the ſeventh, and the mi of the concord of ſixth added will aſcend on the fa, for there is no ſhorter courſe to prevent the diſſonance.

Let us now ſee what courſe the fundamental ſound ought to take in relation to the movement aſſigned to the diſſonance. Since one of the two joined ſounds remains in its place, it ought to form an union in the following concord. The interval, which the fundamental baſs ought to form at quitting the concord, ought then to be determined on theſe two conditions: 1ſt. That the octave of the preceding fundamental ſound may continue in its place after the concord of the ſeventh, and the fifth after the concord of ſixth added. 2dly. Let the ſound, on which the diſſonance is reſolved, be one of the harmonies of that to which the fundamental baſs paſſes. Moreover, the beſt movement of the baſs being by intervals of the fifth, if it deſcends from the fifth in the firſt caſe, or if it aſcends from the fifth in the ſecond, all the conditions will be entirely fulfilled, as it is evident, by the inſpection only of the example.

Perfect Concord. Seventh. Sixth added.

From thence is drawn a method of knowing to whatever chord of the tone each of the two concords is moſt ſuitable. Which are the two moſt eſſential chords in each tone? The tonic and dominant. How can the baſs have its direction by deſcending from the fifth on two eſſential chords of the tone? It muſt be by paſſing from the dominant to the tonic, of which the dominant is the chord to which the concord of the ſeventh is moſt ſuitable. How can the baſs by aſcending from the fifth have its direction on two eſſential chords of the tone? 'Tis by paſſing from the tonic to the dominant, and of which the tonic is the chord to which the concord of ſixth added is moſt apt. The reaſon for which ſee in the example, where I have given a dieſis to the fa of the concord which follows the latter, for the re being dominant tonic, ought to bear the major third. The baſs may have other directions, but thoſe are the moſt perfect and the two principal cadences. (Vide CADENCE.)

If theſe two diſſonances are compared with the fundamental ſound, we find, that that which deſcends is a minor ſeventh, and that which riſes, a minor ſixth; from whence we draw this new rule, that the major diſſonances ought to aſcend, and the minor deſcend; for, in general, a major interval has leſs courſe to take in aſcending, and a minor in deſcending, and generally alſo in diatonic directions, the ſmaller intervals are preferable.

When the concord of the ſeventh bears a major third, that third forms with the ſeventh another diſſonance, which is the falſe fifth, or by variation, the triton. This third oppoſite to the ſeventh, is alſo called major diſſonance, and it is preſcribed to it to aſcend, but that is in the quality of a ſenſible note, and, without the ſecond, that pretended diſſonance would by no means exiſt, or would not be treated as ſuch.

One obſervation not to be forgotten is, that the two only notes of the ſcale, which are not found in the harmonics of the two principal chords ut and ſol, are preciſely thoſe which are therein introduced by the diſſonance, and furniſh, by this means, the diatonic gamut, which, without this, would be imperfect; and which explains how the fa and la, though ſtrange to the mode, are found in its ſcale, and why their intonation, always rough, in ſpite of cuſtom, places at a diſtance the idea of the principal tone.

We

We muſt alſo take notice, that theſe two diſſonances, viz. the major ſixth and minor ſeventh, differ no more than a ſemi-tone, and would differ ſtill leſs if the intervals were very exact. By the aſſiſtance of this obſervation we may draw from the principle of reaſoning, an origin nearly approaching to both, as I will demonſtrate.

The harmonics which accompany any ſound whatever, are not bounden by thoſe which compoſe the perfect concord. There are an infinity of others leſs ſenſible in proportion as they become ſharper, and their references more compoſed; and theſe references are expreſſed by the natural ſeries of aliquots, $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{7}$, &c. The ſix firſt terms of this ſeries give the ſounds which compoſe the perfect concord and its redditives, the ſeventh being excluded; this ſeventh term, however, enters like them in the whole reſonance of the generating ſound, tho' leſs ſenſibly; but it does not enter as a conſonance; it muſt then as a diſſonance; and this diſſonance is given by nature. It remains now to ſee its connection with thoſe of which I have ſpoken.

This connection, moreover, is intermediary between each, and nearly approaching to both; for the reference of the major ſixth is $\frac{3}{5}$; and that of the minor ſeventh $\frac{9}{10}$. Theſe two references being reduced to the ſame terms are $\frac{48}{80}$ and $\frac{45}{80}$:

The reference of the aliquot $\frac{1}{4}$ connected to the ſimple by its octaves, is $\frac{4}{7}$; and this reference reduced to the ſame term with the preceding, is found intermediary between the two, in this manner $\frac{336}{560}$ $\frac{320}{560}$ $\frac{315}{560}$; wherein we ſee, that this connection differs from the major ſixth only a $\frac{1}{560}$, or nearly two commas; and from the minor ſeventh only a $\frac{1}{112}$, which is much leſs than a comma. To make uſe of the ſame ſounds in the diatonic genus, and in different modes, it has been neceſſary to change them; but this change is not great enough to eraſe the traces of their origin.

I have demonſtrated, at the word Cadence, how the introduction of theſe two principal diſſonances, the ſeventh and the ſixth added, gives a method of uniting a continuance of harmony by

making it aſcend or deſcend at will, by the interpoſition of diſſonances.

I make no mention here of the preparation of diſſonances, leſs becauſe it has too many exceptions to form from it a general rule, than becauſe this is not its place. (Vide To PREPARE.) In regard to the diſſonances by ſuppoſition or ſuſpenſion, vide alſo thoſe two words.

Laſtly, I mention nothing of the diminiſhed ſeventh, a particular concord, which I ſhall have occaſion to ſpeak of at the word Enharmonic.

Tho' this method of conceiving the diſſonance gives a pretty clear idea of it, yet, as this idea is not drawn from the foundation of the harmony, I am very far from endeavouring to give it a greater praiſe than it merits, nor have I ever given it more than its true worth; but they had till now reaſoned ſo ill on the diſſonance, that I do not imagine myſelf to have proceeded worſe than others. Monſ. Tartini is the firſt, and, till now, the only one who has deduced a theory of diſſonances from the true principles of harmony. To avoid uſeleſs repetitions, I convey the reader to the word Syſtem, where I have made the expoſition of his. I will not take upon myſelf to judge if he has found, or not, that of nature; but I ſhould take notice, at leaſt, that the principles of this author appear to have, in their conſequences, that univerſality and connection which is rarely found, unleſs in thoſe which lead to the truth.

One obſervation more on this article. Every commenſurable interval is really conſonant: theſe are truly diſſonant, only thoſe whoſe references are irrational; for theſe are only thoſe to which no common fundamental ſound can be aſſigned. But the point being paſſed, wherein the natural harmonies are ſtill ſenſible, this conſonance of commenſurable intervals is not admitted any more than the induction. In this caſe, the intervals form a great part of the harmonic ſyſtem, ſince they are in the order of its natural generation, and are referred to the common fundamental ſound; but they cannot be admitted as conſonant by the ear, becauſe it does not perceive them in the natural harmony of the corpo ſonoro. Beſides, the more the interval is compoſed, the more it is raiſed to the ſharp of the fundamental ſound, which is proved by the reciprocal generation of the fundamental ſound, and ſuperior intervals. (Vide the Syſtem of Monſ. Tartini.) Moreover, when the diſtance of the fundamental ſound, at the moſt ſharp of the generator, or generated interval, exceeds the extent of the muſical or perceptible ſyſtem, whatever is beyond that extent, being to be judged void, ſuch an interval has no ſenſible foundation, and ought to be rejected from practice, or only admitted as a diſſonant. This is neither the ſyſtem of Monſ.

Monſ. Rameau, or that of Tartini, or mine; but the dictates of nature, the remainder of which I do not pretend to explain.

MAJOR DISSONANCE, Is that which is prevented by aſcending. This diſſonance is only relative to the minor diſſonance, for it forms a third or ſixth major on the true fundamental ſound, and is no other than the ſenſible note in a concord dominant, or a ſixth added in its own.

MINOR DISSONANCE, Is that which is prevented in deſcending. This is always the diſſonance properly ſo called, i. e. the ſeventh of the true fundamental ſound. The major is alſo that which is formed by a ſuperfluous interval; and the minor by a diminiſhed interval. Theſe different acceptations happen from the word diſſonance being equivocal, and ſignifying ſometimes an interval, and at other times a ſimple ſound.

DITHYRAMB, A kind of Greek ſong, which was ſung in honour of Bacchus, in the Phrygian mode, and was filled with that fire and gayety that the God inſpires to whom it was conſecrated. We muſt not enquire if our modern men of letters, always wiſe, have raiſed their cries on the diſorder and confuſion of Dithyrambs. 'Tis very wrong, without doubt, to get drunk, particularly in honour of the Divinity! but I had much rather be intoxicated, than have that ſilly good-ſenſe, which meaſures, by cold reaſoning, the works and diſcourſes of a man in liquor.

DITONE, Was, in the Greek muſic, an interval compoſed of two tones, viz. a third major. (Vide INTERVAL, THIRD.)

DIVERTISSEMENT, Is the name given to certain collections of dances and airs, which it is the rule in Paris to inſert in each act of an opera, whether comic or tragic. An importunate diverſion, the author of which has taken care to divide the action at ſome intereſting moment, and which the actors and ſpectators, the former ſeated, the latter ſtanding, have the patience to ſee and liſten to.

DIVISIONS, By this name were called the different methods of applying to the notes, the ſyllables of the gamut, according to the different poſitions of the two ſemitones of the octave, and according to the different routes to come at them. As Aretin invented only ſix of theſe ſyllables, and as there are ſeven notes to ſound in an octave, it muſt be neceſſary to repeat the name of ſome note. This was the reaſon that they called always mi fa or fa la, the two notes, between which one of the ſemitones was placed. Theſe names determined at the ſame time thoſe of the neareſt notes, whether in aſcending or deſcending. Moreover, as the two ſemitones are ſubject to change their place in the modulation, and as there is in muſic a quantity of different methods to apply the ſix ſame ſyllables to them, theſe methods were called

called diviſions, becauſe the ſame notes therein continually changed their names. (Vide GAMUT.)

In the laſt age the ſyllable ſi was added to the ſix firſt of the gamut of Aretin. By this means the ſeventh note of the ſcale being found named, the diviſions became uſeleſs, and were aboliſhed from the French muſic; but amongſt all the other nations, where, according to the genius of the artiſt, the muſicians always take their old track, for the perfection of the art, they have not adopted the ſi; and there is ſome appearance, that in Italy, in Spain, in Germany, and in England, the diviſions will ſerve ſometimes for the inconvenience of beginners.

DO, A ſyllable which the Italians ſubſtitute in the place of that of ut, the ſound of which they find too rough. The ſame motive has led many perſons to undertake, and among others Monſ. Sauveur, to change the names of the ſyllables of our gamut; but the ancient cuſtom has always prevailed amongſt us. It is, perhaps, an advantage; it is good to accuſtom one's ſelf to ſol fa by rough ſyllables, when we have none more ſonorous to ſubſtitute in their place in ſinging.

DODECACHORD, This is the title given by Henri Glavean to a large book of his compoſition, in which, adding four new tones to the eight uſed in his time, and which ſtill remain in the Roman eccleſiaſtic canto's, he thinks he has re-eſtabliſhed, in their purity, the twelve modes of Ariſtoxenes, who, however, had thirteen; but this pretence has been refuted by J. B. Doni, on his Treaty on the Genera and Modes.

DOMINANT, A dominant, or ſenſible concord, is that which is practiſed on the dominant of the tone, and which announces the perfect cadence. Every major perfect concord becomes dominant as ſoon as the minor ſeventh is added to it.

DOMINANT, Is, of the three eſſential notes of the tone, that which is a fifth above the tonic. The tonic and the dominant determine the tone, they are each the fundamental of a particular concord; whereas the mediant, which conſtitutes the mode, has no concord with it, and only forms part of that of the tonic.

Monſ. Rameau generally gives the name of dominant to every note which bears a concord of the ſeventh, and diſtinguiſhes which bears the ſenſible concord, by the name of dominant tonic; but on account of the length of the word, this addition has not been adopted by artiſts, and they continue to call the 5th of the tonic ſimply dominant, and they do not call them dominants but fundamentals, the other notes bearing the concord of the ſeventh, which is ſufficient for its expreſſion, and prevents confuſion.

DOMINANT,

DOMINANT, In church muſic, is the note which is moſt ſtruck, in whatever of the tonic we may be. There are in church muſic a dominant and tonic, but no mediant.

DORIC, The doric mode was one of the moſt ancient in the Greek muſic, and it was the flatteſt and loweſt of thoſe which have been ſince called authentic.

The character of this mode was ſerious and flat, but of a temperate flatneſs, which rendered it proper for war, and religious ſubjects. Platon judges the majeſty of the doric mode as very proper to preſerve good morals; and 'tis for this reaſon that he permits the uſe of it in his republic.

It was called doric becauſe it was in uſe amongſt the people of that name. The invention of this mode was attributed to Thamaris of Thrace, who having been ſo unlucky as to defy the muſes, and be conquered, he was deprived by them of his eyes and lyre.

DOUBLE, Double, or redoubled intervals, are all thoſe which exceed the extent of the octave. In this ſenſe, the tenth is double of the third, and the twelfth double of the fifth. Some give alſo the name of double intervals to thoſe which are compoſed of two equal intervals, as the falſe fifth, which is compoſed of two minor thirds.

DOUBLE, They call double, the airs of a piece of muſic ſimple in itſelf, which are figured and doubled by the addition of many notes, which vary and adorn the canto, without disfiguring it. This is what the Italians call variazioni. (Vide VARIATIONS.)

There is this difference between the doubles and the flouriſhes, that the one are at the choice of the muſician, which he may make or quit at pleaſure to re-take the ſimple. But the double is never left, for when once it is begun, it muſt be continued throughout the whole of the air.

DOUBLE, Is alſo a word made uſe of in the opera of Paris, to mark out the actors next in order, who ſupply the place of the principal actors, when they leave them thro' ſickneſs or fantaſy, or when an opera is nearly at its end, and another is preparing. We muſt have ſeen an opera in doubles to have any conception of ſuch a ſight; and how great muſt be the patience of any one who would viſit it in that condition. All the zeal of the good French citizens, well provided with ears to prove it, is hardly ſufficient to undergo ſo deteſtable a charivari.

TO DOUBLE, To double an air, is to place doubles therein. To double a part, is to ſubſtitute one in the place of the principal actor. (Vide DOUBLE.)

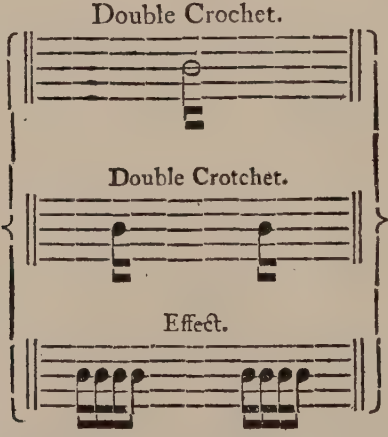
DOUBLE CHORD, A kind of play on the violin, which conſiſts in touching two chords at the ſame time, making two different

different parts. "The double chord has often a great effect." "It is difficult to play juſtly on the double chord."

DOUBLE DEMI CROTCHET, A note in muſic equal to the fourth of a minum, or the half of a crotchet. Sixteen double demy crotchets are conſequently neceſſary for a ſemibreve, or four timed meaſure. (Vide MEASURE, POWER of the NOTES.)

We here ſee the figure of the double demi crotchet tied or detached . It is called by that name on account of the double dark at its tail, and which we muſt diſtinguiſh from that properly called ſo, which makes the ſubject of the following article.

DOUBLE CROCHET, A note of abbreviation, which ſhews the diviſion of the notes into double demi crochets, as the ſimple crochet ſhews their diviſion into demi crochets. Vide the Figure and effect of the double crochet.

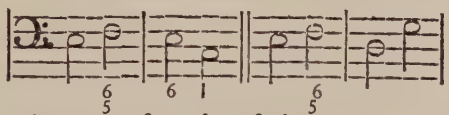



DOUBLE EMPLOI, A name given by Monſ. Rameau to the two different methods by which the concord of the ſub-dominant may be treated and conſidered, viz. as fundamental concord of the ſixth added, or as concord of the greater ſixth, varied from a fundamental concord of the ſeventh. In effect, theſe two concords bear exactly the ſame names, are cyphered in the ſame manner, and are uſed on the ſame chords of the tone, ſo that often we cannot diſtinguiſh which the author intended to uſe; but by the aſſiſtance of the following concord which prevents it, and which in the two caſes is different.

To make this diſtinction, we conſider the diatonic progreſs of the two notes, which form the fifth and ſixth, and which making between

between themſelves an interval of the ſecond, are one or the other the diſſonance of the accord.

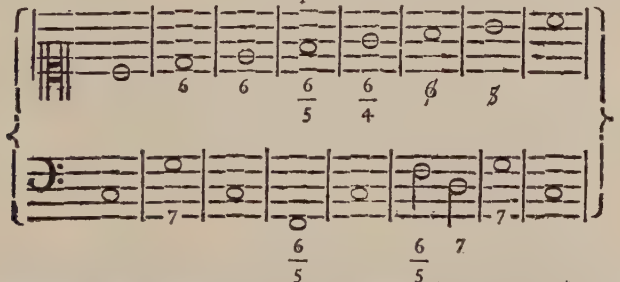
This progreſs is alſo determined by the movement of the baſs. If then, of theſe two notes, the ſuperior is diſſonant, it will aſcend a degree in the following concord. The inferior will continue in its place, and the concord will be a ſixth added. If it is the inferior which is diſſonant, it will deſcend in the following concord. The ſuperior will remain in its place, and the concord will be that of the greater ſixth. Vide the two caſes in the double emploi.



In regard to the compoſer, the uſe he may make of the double emploi, is to conſider the concord, which bears it in one light at going in, and another at going out; ſo that falling in with it, as with a concord of ſixth added, it prevents it as a concord of greater ſixth, and ſo reciprocally.

Monſ. D'Alembert has ſhewn that one of the principal uſes of the double emploi, is to be able to bear the diatonic ſucceſſion of the gamut as far as the octave, without changing the mode, at leaſt in aſcending, for in deſcending it is changed. Vide the example of that gamut and its fundamental baſs.

Gamut intirely in the ſame tone by favour of the Double Emploi.



It is evident, according to Monſ. Rameau's ſyſtem, that all the harmonic ſucceſſion, which reſults from it, is in the ſame tone; for even on a preſſing occaſion, there are uſed only the three concords of the tonic, the dominant, and ſub-dominant; this laſt, giving, by the double emploi, that of the ſeventh of the ſecond note, which is uſed on the ſixth.

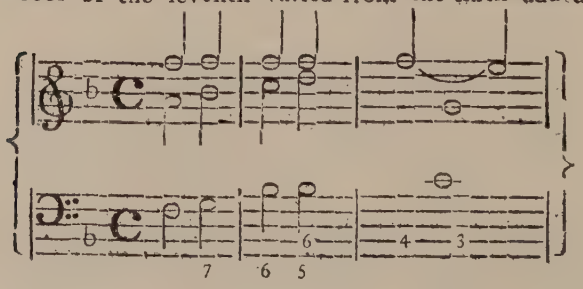
In regard to what Monſ. D'Alembert adds in his Elements of Muſic, page 80, and which he repeats in the Encyclopædia, at the article double emploi, viz. that the concord of the ſeventh

re fa la ut, even tho' we ſhould look upon it as varied fa la ut re, cannot be followed by the concord ut mi ſol ut; I cannot be of his opinion in that point.

The proof which he gives of it, is, that the diſſonance ut in the firſt concord cannot be prevented in the ſecond, ſince it continues in its place; but in this concord of the ſeventh, re fa la ut, varied from this concord, fa la ut re, in the ſixth added, it is not ut, but re, that is the diſſonance, which conſequently ſhould be prevented by aſcending on mi, as it really does in the following concord, in ſuch a manner, that this courſe is forced within the baſs itſelf, which from re could not, without an error, return to ut, but ought to aſcend to mi, to prevent the diſſonances.

Monſ. D'Alembert then ſhews, that this concord, re fa la ut, preceded and followed by that of the tonic, cannot be authorized by the double emploi; and this is ſtill very true, ſince that concord, tho' cyphered with a 7, is neither treated as a concord of the ſeventh at going in, or coming out, or at leaſt it is not neceſſary to treat it as ſuch, but only as a variation of the ſixth added, whoſe diſſonance is in baſs; in which we ſhould take notice, that this diſſonance is never prepared: Wherefore, tho' in ſuch a paſſage the double emploi is not brought in queſtion, tho' the concord of the ſeventh is only there apparently, and impoſſible to prevent in the rules, this does not hinder the paſſage from being good and regular, as I have proved it to theoricians, and as I am going to prove it to artiſts, by an example of this paſſage, which cannot aſſuredly be condemned by any of them, or juſtified by any other fundamental baſs than mine.

Proof of the ſeventh varied from the ſixth added.




I confeſs that this variation of the ſixth added, which conveys the diſſonances to the baſs, has been blamed by Monſ. Rameau; that author, taking for fundamental the concord of the ſeventh which reſults from it, has choſen rather to make the fundamental baſs deſcend diatonically, and prevent a ſeventh by another ſeventh, than to explain this ſeventh by a variation.

I had

I had removed this error, and and many others in the papers which had continued a long time in Monſ. D'Alembert's hands, when he compoſed his Elements of Muſic, ſo that it is not his ſentiments that I attack, but my own which I defend.

In regard to the concluſion, the double emploi cannot be uſed with too great reſerve, and the greateſt maſters, are thoſe who are moſt wary in employing it.

DOUBLE FUGUE, We make a double fugue, when in the continuance of a fugue already appearing, another fugue is introduced in a quite different method; and this ſecond fugue muſt have its anſwer and entrance juſt as the firſt, which cannot be practiſed, but by four parts. We may, with more parts, make a ſtill greater number of different fugues be heard, but the confuſion is always to be feared, and 'tis then the maſter-piece of the art to treat them nicely. For this purpoſe, ſays Monſ. Rameau, we muſt obſerve, as much as poſſible, to make them enter only one after the other, particularly the firſt time, that their progreſſion be varied; that they be differently characterized; and that, if they cannot be heard together, at leaſt that a portion of the one be heard with a portion of the other. But theſe laborious taſks are made more for the ſcholar than the maſter: Theſe are leaden weights tied to the feet of young runners, to make them more nimble when delivered from them.

DOUBLE OCTAVE, An interval compoſed of two octaves, otherwiſe called fifteenth, and which the Greeks called diſ-diapaſon.

The double octave is in computation doubled from the ſimple octave, and is the only interval which does not change its name, when compoſed with itſelf.

DOUBLE TRIPLE, An ancient name of the triple of minums, or the meaſure of three for two, which is ſtruck as three timed, and contains a minum for each time. This meaſure is no longer in uſe but in France, where it even begins to be aboliſhed.

DOLCE, This word in muſic is oppoſed to forte, and is written above the lines of the French muſic, and below the Italian, where we wiſh to leſſen the noiſe, temperate and ſweeten the vehemence of the ſound, as in echo's and parts of accompaniment. The Italians often write piano in the ſame ſenſe; but their critics in muſic declare them not to be ſynonymous terms, and that it is from abuſe that moſt authors uſe them as ſuch. They ſay, that piano ſignifies only a moderation of the ſound, a diminution of the noiſe; but that dolce denotes, beſides that, a method of playing piu ſoave, ſweeter, more united, and anſwering almoſt to the word louré in French.

The dolce has three diviſions, which we muſt take notice of, viz. the half play, the ſweet, and the very ſweet. However nearly theſe diviſions may appear to be allied, a well-played band renders them very diſtinct and ſenſible.

DRAMATIC, This epithet is given to imitative muſic, proper to theatrical pieces of ſinging, as operas. It is alſo called lyric muſic. (Vide IMITATION.)

DUET, This name is generally given to all kinds of muſic in two parts; but at preſent the ſenſe is reſtrained to two reciting parts, vocal or inſtrumental; the ſimple accompaniments being excluded, which are looked upon as nothing. Wherefore we call duet an air for two voices, tho' there be a third part for the thorough baſs, and others for the ſymphony. In a word, to conſtitute a duet, two principal parts are neceſſary, between which the air muſt be equally diſtributed.

The rules of the duet, and of two part muſic in general, are the moſt rigorous for the harmony; we therein refuſe many paſſages, many movements, which would be permitted to a greater number of parts; for a paſſage or a concord which would pleaſe in a third or fourth ſound, becomes diſguſtful to the ear without them. Moreover, we ſhould be unpardonable to chooſe ill, having only two ſounds to take in each concord. Theſe rules were formerly ſtill more ſevere, but all that has been now laid aſide in theſe latter times, where all the world ſet up for compoſers.

We may view the duet in two lights, viz. ſimply as a two part air, ſuch as, for inſtance, the firſt verſe of the ſtabat of Pergoleſis, the moſt perfect and affecting duet that has come from the pen of any muſician; or as a part of imitative and theatrical muſic, ſuch as the duets in the opera ſcenes. In each caſe, the duet is, of all kinds of muſic, that which requires moſt taſte, choice, and the moſt difficult to treat on, without going from the unity of melody. I beg to be permitted to make ſome obſervations here on the dramatic duet, whoſe particular difficulties are joined to thoſe which are common to all the duets.

The author of the letter on the opera of Omphale, has ſenſibly remarked that the duets are out of nature in imitative muſic; for nothing is leſs natural than to ſee two perſons ſpeaking to each other for a certain time, either to ſay the ſame thing, or to contradict, without ever liſtening, or anſwering each other; and tho' this ſuppoſition might be admitted in certain caſes, it could not ſtill be uſed in tragedy, where this indecency is neither ſuitable to the dignity of the perſons who ſpeak, or to the education they are ſuppoſed to have.

There is nothing then but the tranſports of paſſion which can lead two heroic ſpeakers to interrupt each other, to ſpeak both at

at once; and, even in ſuch a caſe, it is very ridiculous that theſe pretended diſcourſes ſhould be prolonged ſo as to make a complete piece on both ſides.

The firſt method of preventing this abſurdity is then, to place the duets only in lively and touching ſituations, where the agitation of the ſpeakers throws them into a kind of delirium, capable of making the ſpectators and themſelves forget thoſe theatrical ornaments which ſtrengthen the illuſion in a cold ſcene, and deſtroying it in the heat of their paſſions. The ſecond method is, to uſe the duet as much as poſſible in dialogue. This dialogue ought not to be phraſed and divided into greater periods, as that of the recitative, but formed of interrogations, anſwers, ſhort lively exclamations, which give occaſion to the melody to paſs alternately and nimbly from one part to another, without ceaſing to form a continuance, which may remain on the ear. A third attention is, not to take all the violent paſſions indifferently for ſubjects, but only thoſe which are ſuſceptible of a ſweet melody, and a little contraſt ſuitable to duets, to render its tune accented, and its harmony agreeable. Rage and paſſion are too quick in their courſe. Nothing can be diſtinguiſhed; we hear only a confuſed roar; and the duet has no effect. Moreover, the perpetual return of injuries and inſults would be more ſuitable to herdſmen than heroes; and this is exactly ſimilar to the rhodomontade of thoſe perſons who prefer fear to danger. Much leſs ſhould we make uſe of the ſoft accents, of chains, darts, flames, a flat and cold jargon, which paſſion never knew, and of which good muſic ſtands no more in need than good poetry. The inſtant of a ſeparation, that wherein one of the two lovers goes to death, or into the arms of another, the ſincere reformation of one faithleſs, the touching contention of a mother and her ſon, wiſhing to die for each other: All thoſe moments of affliction, where one cannot fail of ſhedding delicious tears; thoſe are the true ſubjects to be treated in duo, with that ſimplicity of words which is ſuitable to the language of the heart.

All thoſe who have frequented lyric theatres know how much the word addio only excites compaſſion and emotion in the whole audience. But ſo ſoon as a piece of wit, or well-turned phraſe begins to be perceptible, the charm inſtantly vaniſhes, and is ſucceeded by immoderate laughter.

Herein are ſome obſervations which are neceſſary to the poet. In regard to the muſician, it is his duty to find an air ſuitable to his ſubject, and diſtributed in ſuch a manner, that each of the ſpeakers, taking his turn, the whole compaſs may form only one melody; which, without changing the ſubject, or at leaſt without altering the movement, may paſs in its progreſs

from one ſide to the other, without ceaſing to be one. The duets which have the greateſt effect, are thoſe with equal voices, becauſe their harmony is neareſt connected; and amongſt equal voices, thoſe which have the greater effect are the treble, becauſe their diapaſon, being ſharper, is more diſtinct, and the tone more touching. The duets alſo of this ſpace are the only ones employed by the Italians in their tragedies; and I don't doubt, but the uſe of caſtrati, in the parts of men, was due in ſome meaſure to this obſervation. But tho' there ſhould be an equality between the voices, and unity in the melody, it muſt not be ſaid that the two parts ſhould be exactly ſimilar in their turn of ſinging; for beſides the diverſity of ſtyles ſuitable to them, it is very rare that the ſituation of two actors ſhould ſo perfectly be the ſame, as that they ought to expreſs their ſentiments in the ſame manner; wherefore the muſician ought to vary their accent, and give to each of the two the character which beſt paints the ſtate of his ſoul, particularly in alternate recitative.

When we join the two parts together (which ought to be done ſeldom, and continue but little) we muſt find an air ſuſceptible of a courſe by thirds or by ſixths, in the which the ſecond part may cauſe its effect, without being divided from the firſt, (Vide UNITY OF MELODY.) We muſt preſerve the roughneſs of he diſſonances, the piercing and ſtrengthening ſounds, the fortiſſimo of the orcheſtra for moments of diſorder and tranſport, where the actors, ſeeming to forget themſelves, carry their madneſs into the ſoul of every ſenſible ſpectator, and make him feel the power of a harmony nicely managed; but ſuch periods ſhould be rare, ſhort, and artfully introduced. One muſt, by a ſweet and affecting muſic, have already diſpoſed the heart and ear to every emotion, that each of them may unite in their attention to theſe violent paſſions; and they muſt paſs with that rapidity which is appropriated to our weakneſs; for when the agitation is too great, it cannot laſt, and whatever is beyond nature can make no impreſſion.

As I cannot flatter myſelf that I am clearly underſtood throughout the whole of this article, I think it neceſſary to join an example, on which the reader, comparing my ideas, may have a more eaſy conception of them. It is drawn from the Olympiad of Metaſtaſio; the curious will do well to look into the muſic of the ſame opera, by Pergoleſis, how this firſt muſician of his time, and ours, has treated this duet; the ſubject of which is here preſented.

Megacles having engaged to fight for his friend in the games, wherein the reward of the conqueror was the beautiful Ariſtæa, finds, in this ſame Ariſtæa, the miſtreſs whom he adores, delighted with the combat, which he is about to ſuſtain, and which

ſhe attributes to his love for him. Ariſtæa ſpeaks on this ſubject the moſt affecting words, to the which he gives a no leſs tender anſwer, but with the ſecret deſpair of neither being able to recall his word, nor diſpenſe, at the expence of his happineſs, with that of a friend to whom he is indebted for his life: Ariſtæa, alarmed at the grief which ſhe ſees painted in his eyes, and which his broken and equivocal diſcourſes confirm, acquaints him with her inquietude; and Megacles being unable to ſupport, at the ſame time, his own deſpair, and the troubles of his miſtreſs, leaves her without an explanation, and relinquiſhes her a prey to the moſt piercing ſorrows. It is in this ſituation that they ſing the following duet:

MEGACLES.

Mia vita . . . . . addio
Ne' giorni tuoi felici
Ricordati di me.

ARISTÆA.

Perchè coſi mi dici,
Anima mia, perchè?

MEGACLES.

Taci, bell' Idol mio.

ARISTÆA.

Parla, mio dolce amor.

TOGETHER.

MEGACLES.—Ah! che parlando,
ARISTÆA.— Ah! che tacendo, } oh Dio!
Tu mi traffigi il cor!

ARISTÆA, aſide.

Veggio languir chi adoro,
Ne intendo il ſuo languir!

MEGACLES, aſide.

Di geloſia mi moro,
E non lo poſſo dir!

TOGETHER.

Chi mai provò di queſto
Affanno più funeſto,
Più barbaro dolor ?

As much as this dialogue appears to be only the continuance of the ſcene, what collects it into one duet only, is the unity of the deſign, by which the muſician re-unites all its parts, according to the poet's intention.

In regard to the burleſque duets, which are uſed in the intermediaries, and other comic operas, they are not generally for equal voices, but between the baſs and the treble. If they have not the pathos of the tragic duets, in lieu of it they are ſuſceptible of a more ſtriking variety, of more different accents, and more expreſſive characters. All the gentility of coquetry, all the amuſement of the laughable characters, all the contraſt of the nonſenſe of one ſex, and the cunning of the other; laſtly, all the acceſſary ideas of which the ſubject is ſuſceptible; all theſe may occur to throw a prettineſs and an intereſting harmony in theſe duets, the rules of which are in other reſpects the ſame as the preceding, in what regards the dialogue and unity of melody. To find a comic perfect duo to my liking, in all its parts, I will not omit the immortal author who has furniſhed me with theſe two examples, but will cite the firſt duet of the Serva Padrona: "Lo conoſco a quegl' occhietti, &c. &c." and boldly as a model of agreeable ſinging, unity of melody, ſimple harmony, pure and brilliant accent, dialogue, and taſte, in which nothing can fail, when it is well rendered, if the hearers who underſtand it, pay it that honour which it merits.

DUPLICATION, A term in church muſic. The intonation by duplication is made by a kind of periceleſis, by doubling the penultimate note of the word, which terminates the intonation, which has no place but when this penultimate is immediately below the laſt. In that caſe, the duplication ſerves to mark it more fully, in the manner of a ſenſible note.

DURATE, By this term is called every thing which diſguſts the ear by its effect. There are voices rough and ſliding, inſtruments ſharp and ſtill rough, as well as compoſitions durate. The roughneſs of the B ſharp occaſioned its formerly receiving the name of B durate. There are rough intervals in melody, ſuch as the diatonic progreſs of the three tones, whether in aſcending or falling, and ſuch in general are falſe relations. There are in the harmony rough concords, ſuch as the triton, the ſuperfluous fifth, and, in general, all the major diſſonances. The continued roughneſs is diſguſting to the ear, and renders a piece of

of muſic diſagreeable; but when managed with art, it anſwers the purpoſe of a claro obſcure, and makes an addition to the expreſſion.

---

# E.

E SI MI, E LA MI, OR SIMPLY E, Is the third ſound of the gamut of Aretin, which is otherwiſe called mi. (Vide GAMUT.

ECBOLE was, in the moſt ancient Greek muſic, an alteration of the enharmonic genus, when a chord was accidentally raiſed five dieſis's above its ordinary concord.

EAR. This word is figuratively uſed as a muſical term. To have an ear, is to have a ſenſible, clear, and true idea in hearing muſic; ſo that, whether for intonation, or for meaſure, we may be diſguſted with the ſmalleſt error, and pleaſed with the beauties of that art, when hearing them. He has a bad ear who is continually ſinging falſe, cannot diſtinguiſh the true intonation from the falſe, or who is not ſenſible of the preciſion in a meaſure, and ſtrikes it at an unequal or counter time. Wherefore the word ear is always taken for a nicety in the ſenſation or judgment of that ſenſitive faculty. In this acceptation the word ear is never uſed, but with the ſingular, and with the partitive article. "To have "an ear," &c. &c. &c.

ECHO. A returned or reflected ſound, by a ſolid body, and which by that means is repeated, and renewed to the ear. This word is derived from the Greek ἦχος, a ſound.

We call alſo by the name of echo, the place where the repetition is heard.

We diſtinguiſh the echos taken in this ſenſe into two kinds, viz. 1ſt, the ſimple echo, which only repeats the voice once; 2dly, the double, or multiple, which repeats the ſame ſounds twice, or more ſounds.

In ſimple echos, there are ſome tonics, that is, which only repeat the muſical and ſuſtained ſound; and others ſyllabic, which repeat alſo the words of the voice.

We may draw a part from multiple echos, to form concords and harmony with a ſingle voice, by making between the voice and echo a kind of canon, the meaſure of which ſhould be directed on the time which paſſes betwixt the pronounced ſounds. This method of making to one's ſelf alone an harmonic concert,

muſt, if the ſinger be ingenious, and the echo ſtrong, appear aſtoniſhing, and almoſt magical to an unprepoſſeſſed hearer.

The name of echo is conveyed in muſic to thoſe kinds of airs or pieces, in the which, by the imitation of the echo, are repeated now and then, ſweet or ſtrong, a certain number of notes. It is on the organ that this method of playing is moſt commonly uſed, on account of the facility there is in forming echos on the poſitive: We may alſo form echos on the harpſichord, by means of the ſmaller keys.

The Abbé Broſſard ſays, that the word echo is ſometimes uſed in the place of dolce, or piano, to denote, that the voice, or inſtrument, ſhould be ſweetened as to form an echo. This cuſtom no longer ſubſiſts.

ECHOMETRE. A kind of graduated ſcale, or rule divided into ſeveral parts, which is uſed to meaſure the duration or length of ſounds, to determine their different powers, and even the references of their intervals.

This word is derived from the Greek ἦχος, a ſound, and μετρου, a meaſure. I will not undertake the deſcription of this machine, becauſe no uſe will ever be made of it; and, as the beſt echometre is a ſenſible ear, and long experience in muſic; thoſe who wiſh to know more of it, may conſult the work of Monſieur Sauveur, inſerted in thoſe of the Academy of Sciences, 1701. They will there find two ſcales of this kind, one of Monſieur Sauveur, and the other of Monſieur Loulie. (Vide Chronometre.)

ECLYSE was, in the moſt ancient Greek muſic, an alteration in the enharmonic genus, when a chord was accidentally lowered three dieſis's below its ordinary concord; wherefore the eclyſe was contrary to the ſpondeaſm.

EIGHTEENTH. An interval which comprehends ſeventeen conjoint degrees, and conſequently eighteen diatonic ſounds, counting the two extremes. This is the double octave of the fourth. (Vide fourth.)

EFFECT. An agreeable and ſtrong impreſſion which an excellent muſic imprints on the ear and mind of an audience; wherefore, the ſingle word effect ſignifies a pleaſing and fine effect in muſic. We not only ſay of a work, that it has an effect, but diſtinguiſh under the name of circumſtances, which are the cauſe of the effect, all thoſe wherein the produced ſenſation appears ſuperior the methods employed to raiſe it.

A continued practice may teach the knowledge of what things produce an effect when laying before the eye, but it is genius only which can diſcover them. It is the fault of all bad compoſers and beginners to load parts upon parts, inſtruments on inſtruments, to diſcover the effect which follows from them, and to open, as an ancient ſaid, a wide mouth to blow on a ſmall flute. One would ſay,

to

to ſee their partitions ſo loaded, ſo numerous, that they intend to ſurpriſe by prodigious effects; and if in hearing the whole you are ſurpriſed, 'tis to hear a trifling piece of muſic, bald, confuſed, without effect, and more proper to ſtun the ears than to delight them. On the contrary, the eye wanders over the partitions of great maſters to diſcover thoſe effects, raviſhing and ſublime, which their muſic, when executed, produces. It is, that a continued detail is ignorant of true genius, that it affords no amuſements by a quantity of ſilly objects, but that it moves you by great effects, and the ſtrength and ſimplicity of it united, always form its character.

ELEGY. A kind of compoſition for the flute, invented, as it is ſaid, by Sacadas, of Argos.

ELEVATION. The elevation of the hand or foot, in ſtriking the time, ſerves to mark the weaker time, and is properly called raiſed. Among the ancients it was the contrary. The elevation of the voice in ſinging, is the movement by which it is carried into ſharp.

ELEVENTH. Replique, or octave of the fourth. This interval is called the eleventh, becauſe eleven ſub diatonics muſt be formed to paſs from one of theſe terms to the other.

Monſieur Rameau wiſhed to give the name of eleventh to the concord which is generally called fourth; but as this denomination has not been followed, and as Monſieur Rameau himſelf has continued to cypher the ſame concord with a four and not an eleven, we muſt conform to cuſtom. (Vide concord, fourth ſuppoſition.)

ELINE. A name given by the Greeks to a ſong of the weavers. (Vide Song.)

ENDEMATIA was the air of a kind of dance peculiar to the inhabitants of Argos.

ENHARMONIC, one of the three genera of the Greek muſic, often alſo called harmony by Ariſtoxenes and his followers.

This genus reſulted from a particular diviſion of the tetrachord, according to which, the interval which is placed betwixt the lichanos, or third chord, and the meſis, or fourth being of a triton, or third major, there continues to complete the tetrachord in flat, only a ſemi tone to divide into two intervals, viz. from the hypaton to the parhypaton, and from the parhypaton to the lichanos. We will explain under the word genus how the diviſion was made.

The enharmonic genus was the ſweeteſt of the three, in the opinion of Ariſtides Quintilian. It paſſed as very ancient, and the generality of authors, attributed the invention of it to Olympus, the Phrygian. But his tetrachord, or rather his diateſſaron of this genus, contained only three chords, which formed together

two uncompoſed intervals, the firſt of a ſemi tone, and the other a third major; and from theſe two intervals alone, repeated from tetrachord to tetrachord, reſulted at that time all the enharmonic genus. 'Twas not, till after the time of Olympus, that they thought of inſerting, in imitation of the other genera, a fourth chord between the two firſt, to form the diviſion which I have juſt mentioned. We may ſee the connections, according to the ſyſtems of Ptolomy and Oriſtoxenes, at the word diatonic.

This genus, ſo ſurpriſing, ſo admired by the ancients, and according to ſome, the firſt diſcovered of the three, kept not its renown long. Its extreme difficulty rendered it ſoon forſaken, in proportion as art gained combinations by loſing its energy; and when the agility was a ſubſtitute for the nicety of the ear. Plutarch alſo finds great fault with the muſicians of his time, for having loſt the fineſt of the three genera, and daring to ſay, that its intervals were not ſenſible, as if every thing that eſcaped their groſs ſenſes (adds that great philoſopher) muſt be out of nature.

We have at preſent a kind of enharmonic genus entirely different from that of the Greeks. It conſiſts, as the two others, in a peculiar progreſſion of harmony, which engenders, in the courſe of the parts of the enharmonic intervals, by uſing it ſucceſſively, or, at the ſame time, between two notes, which are a tone from each other, the B flat of the inferior, and the dieſis of the ſuperior. But though, according to the rigor of the connections, this dieſis and B flat ought to form an interval betwixt themſelves, (vide ſcale, and fourth of a tone) This interval is found void, by means of the temperament, which, in the eſtabliſhed ſyſtem, makes the ſame tone ſerve two purpoſes, which does not prevent ſuch a paſſage from producing, by the force of modulation and harmony, a part of the effect, which we ſeek in the enharmonic tranſitions.

As this genus is but little known, and as our authors are contented to give ſome notions of it too ſuccinct, I think I muſt explain it here a little more at length.

We muſt then obſerve, that the concord of the ſeventh diminiſhed, is the only one on which we can practice paſſages truly enharmonic; and that by virtue of that ſingular propriety which it has of dividing the entire octave into equal intervals. Let us take in the four ſounds which compoſe this concord, that which we wiſh for fundamental, and we ſhall always equally find, that the three other ſounds form on this a concord of 7th diminiſhed. Moreover, the fundamental ſound of the concord of 7th diminiſhed is always a ſenſible note; ſo that, without changing any thing in this concord, we may, by a method of double, or quadruple employ, make it ſerve ſucceſſively on four different fundamentals, viz. on four different ſenſible notes.

It

It follows thence, that this ſame concord, without having any change, either in the accompaniment or the baſs, may bear four different names, and conſequently be cyphered in four different methods, viz. with a 7 ♭ under the name of diminiſhed ſeventh; with a 6 + under the name of major ſixth and falſe fifth, with a + 4 5 ♭ under the name of minor third and triton; and laſtly, with a + 2 under the name of ſuperfluous ſecond. It muſt be underſtood, that the cleff ſhould be numbered differently, according to the tones in which we are ſuppoſed to be.

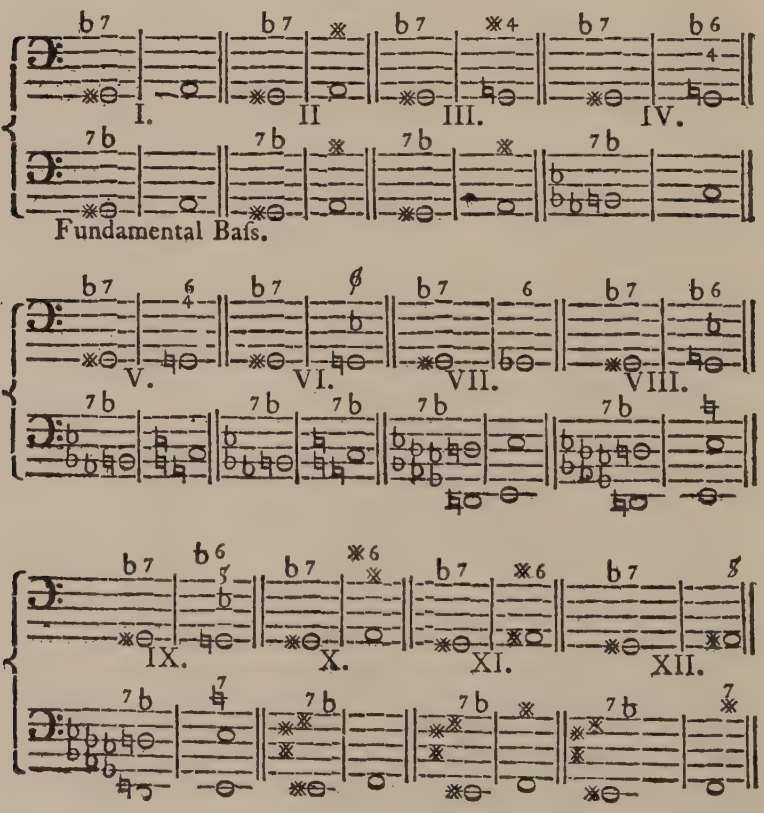
Here then are four methods of going from a concord of diminiſhed ſeventh, by ſuppoſing ourſelves ſucceſſively in four different concords; for the fundamental and natural direction of the ſound, which bears a concord of diminiſhed ſeventh, is to be reſolved on the tonic of the minor mode, of which it is a ſenſible note.

Let us next imagine the concord of the diminiſh'd ſeventh on ut dieſis, a ſenſible note. If I take the third mi as fundamental, it will become a ſenſible note in its turn, and conſequently will expreſs the minor mode of fa; moreover, this ut dieſis reſts certainly in the concord of mi, a ſenſible note, but it is in quality of re B flat, viz. of the ſixth note of the tone, and of the diminiſh'd ſeventh of the ſenſible note; wherefore this ut dieſis, which, as a ſenſible note, was obliged to aſcend into the tone of re, becomes re B flat in the tone of fa, and is obliged to deſcend as diminiſh'd ſeventh, which is an enharmonic tranſition. If inſtead of the third, we take in the ſame concord of ut dieſis the falſe fifth ſol, as a new ſenſible note, the ut dieſis will again become re B flat, in quality of the fourth note, another enharmonic paſſage. Laſtly, if we take the diminiſhed ſeventh itſelf as a ſenſible note, inſtead of ſi B flat, we muſt neceſſarily conſider it as la dieſis, which forms a third enharmonic paſſage on the ſame concord.

Through the means of theſe four different methods of viewing the ſame concord ſucceſſively, we paſs from one tone to another, which appears very diſtant from it. We give a different progreſs to the parts from that, which, in their firſt place, they ought to have; and theſe paſſages when managed a propos, are capable, not only of ſurpriſing, but even delighting the audience, when well conducted.

Another ſource of variety, in the ſame genus, is drawn from the different methods in which the accord may be reſolved which announces it; for though the moſt natural modulation would be to paſs from the concord of diminiſhed ſeventh, on the ſenſible note, to that of the tonic in the minor mode, we may, by ſubſtituting the major for the minor third, render the mode major, and even

even add to it the ſeventh, to change that tonic in dominant, and by this means to paſs into another tone. By means of theſe different reunited combinations, we may get out of the concord in twelve ways. But, from theſe twelve, there are only nine, which, giving the change of dieſis into B flat, or reciprocally, can be truly enharmonic; moreover, in theſe nine different modulations, there are only three different ſenſible notes, each of which is reſolved by three different paſſages; ſo that, by taking it in its true ſenſe, we find on each ſenſible note no more than three truly enharmonic paſſages, all the reſt not being really enharmonic, or having connection with ſome one of the three firſt. (Vide an example of all theſe paſſages.)

*Twelve methods of going out of a concord of diminiſhed ſeventh, wherein are compriſed the three enharmonic tranſitions, and their combinations.*

It

It has been frequently attempted to make entire pieces in the enharmonic genus, in imitation of the modulations in the diatonic genus. To give a kind of rule to the fundamental directions of this genus, it has been divided into diatonic enharmonic, which proceeds by a ſucceſſion of major ſemi tones, and in chromatic enharmonic, which proceeds by a ſucceſſion of ſemi tones minor.

The air in the firſt kind is diatonic, becauſe its ſemi tones are major, and it is enharmonic, becauſe two major ſemi tones together form a tone of enharmonic interval too ſtrong. To form this kind of air, we muſt make a baſs which deſcends from fourth, and aſcends from major third alternatively. A part of the trio between the parcæ in the opera of Hippolitus, is of this kind, but it could never be executed in the opera houſe at Paris, though Monſieur Rameau aſſures us, that it has been performed in other places, by the conſent and deſire of the muſicians, and had a ſurpriſing effect.

The air of the ſecond kind is chromatic, becauſe it proceeds by minor ſemi tones. It is enharmonic, becauſe the two conſecutive ſemi tones minor form too weak a tone of an enharmonic interval.

To form this kind of air, we muſt make a fundamental baſs, which deſcends from minor third, and aſcends from major alternatively. Monſieur Rameau acquaints us, that in the opera of the Gallant Indians, this kind of muſic met with an applauſe that ſhook the very earth; but he was ſo ill uſed, as to be obliged to change it into a common muſic. (Vide the Elements of Muſic by Monſieur Alembert, page 91, 92, 93, and 166.

In ſpite of the example cited and authoriſed by Monſieur Rameau, I think it my duty to acquaint young artiſts, that the enharmonic diatonic, and enharmonic chromatic, appear to me proper to be rejected as genera; and I cannot think that a piece of muſic, modulated in this manner, even let the execution be the moſt perfect, can have the ſmalleſt merit. My reaſons are, that the rough paſſages of one idea to another, at a great diſtance, are ſo frequent therein, that it is not poſſible for the mind to follow theſe tranſitions with the ſame rapidity as the muſic preſents them; that the ear has not time to perceive the ſecret and compoſed connection of the modulations, or to underſtand the ſuppoſed intervals; that there is no longer any ſhadow of tone, or mode, in ſuch ſucceſſions; that it is equally impoſſible to retain that from which we go, or to foreſee that to which we are directed; and that amidſt all this, we no longer have any idea where we are. The enharmonic is no more than a paſſage unexpected, the ſurpriſing impreſſion of which is formed ſtrongly, and continues a long time; a paſſage, conſequently, which ought not to be repeated too often, or too roughly, for fear the idea of the modulation

lation ſhould be troubled, and become entirely loſt; for as ſoon as we begin to hear ſuch concords as have ſo ſenſible connection, and no common foundation, the harmony has no longer any union, or apparent continuance, and the effect which reſults from it is no more than an empty noiſe, without union or taſte. If Monſieur Rameau, when he ſpent his time in uſeleſs calculations, had paid a greater attention to the metaphyſic of his art, it is to be ſuppoſed, that the natural fire of that artiſt had produced prodigies, the ſeed of which was in his genius, but which his prepoſſeſſions have always ſtifled.

I do not even think, that ſimple enharmonic tranſitions can ever have any ſucceſs, either in choruſſes or airs, becauſe each of theſe pieces forms a whole, wherein ſhould reign unity, and whoſe parts ought to have an union betwixt themſelves more ſenſible than this genus can define it.

What then is the real ſituation for the enharmonic? It is, in my opinion, the forced recitative. It is in a ſublime and pathetic ſcene, when the voice ſhould multiply and vary the muſical inflexions in imitation of the grammatical oratorical accent, an accent often impoſſible to be defined; it is in ſuch a ſcene, I affirm, that the enharmonic tranſitions are well placed, when we know how to manage them for ſublime expreſſions, and ſtrengthen them by ſtrokes of ſymphony, which ſuſpend the words, and give them force to the expreſſion. The Italians, who uſe this method admirably, uſe it only on this plan. We may ſee in the firſt recitative of the Orpheus of Pergoleſis, a ſtriking and ſimple example of the effects which this great muſician knew how to draw from the enharmonic, and how far from producing a rough modulation. Theſe tranſitions, when they become natural and eaſy to ſound, give an energic ſweetneſs to the whole declamation.

I have already ſaid, that our enharmonic genus is entirely different from that of the ancients. I will add, that though we have not, like them, enharmonic intervals to ſound, this does not hinder the modern enharmonic from being of a more difficult execution than theirs. Amongſt the Greeks, the enharmonic intervals, purely melodious, did not require, either in the finger, or audience, any change of ideas, but only a great delicacy in the organs of hearing; whereas, in our muſic, we muſt add to the ſame delicacy an exact knowledge and exquiſite ſentiment of the roughest and moſt unnatural harmonic metamorphoſes; for if we do not hear the phraſe, we cannot give the words their neceſſary ſenſe, nor ſing true in an harmonious ſyſtem, if we do not feel the harmony.

TO ENFORCE, is to paſs from the dolce to the forte, or from the forte to fortiſſimo, not on a ſudden, but in a regular gradation, by breathing and augmenting the ſounds, whether on a ſeſſion, or

on

on a continuance of notes, till we have attained what anſwers to the term of enforced: We then re-take the ordinary play. The Italians expreſs the word enforced in their muſic by the term creſcendo, or rinforzando indifferently.

ENTRANCE. The air of a ſymphony, by which a ballet is begun.

The word entrance is uſed alſo in an opera, to ſignify an entire act in thoſe ballet operas, each act of which forms a ſeparate ſubject. "The entrance of Vertumnus in the elements. The entrance of the Inca's in the gallant Indians."

Laſtly, Entrance is alſo ſaid of the inſtant in which each part which follows another begins to make itſelf heard.

ÆOLIAN. The æolian tone or mode, was one of the five modes which were the chief in the Greek muſic, and its fundamental chord was immediately above that of the Phrygian mode. (Vide mode.)

The æolian mode was flat, by the report of Laſus, "I ſing, ſays he, Ceres, and her ſiſter Melibæa, ſpouſe of Pluto, in the "œolian mode filled with flatneſs."

The name of æolian, which this mode bore, did not derive itſelf from the Æolian Iſlands, but from the Eolia, a country in Aſia Minor, where it was firſt uſed.

EPIAULIA. A name which the Greeks gave to a ſong of the millers, called otherwiſe hymea. (Vide ſong.)

Quere. Does not the word ſquawl take its derivation from this word? The ſquawling of a woman, or child who weeps and is lamenting in the ſame tone, has ſome reſemblance with the notes of a mill, and, by the metaphor, to that of a miller.

EPILENIA. A ſong of the grape-gatherers, which was accompanied by the flute. (Vide the fifth book of the Athenæa.

EPINICION. A ſong of victory, by which was celebrated amongſt the Greeks the triumph of a conqueror.

EPISYNAPHIA, is, by the traditions of Bacchus, the conjunction of three conſecutive tetrachords, as are the meſon, hypaton, and ſynnemenon. (Vide ſyſtem tetrachord.)

EPITHALAMIUM. A nuptial air, which was formerly ſung at the door of the new-married ſpouſes, to wiſh them a happy union. Such ſongs are not in uſe amongſt us; for we know very well that it is a loſt labour. When they are made between friends and acquaintance, we generally ſubſtitute, in the place of thoſe ſimple and chaſte thoughts, ſome ones equivocal and obſcene, more conformable to the taſte of the age.

EPITRITE. The name of one of the rhimes in the Greek muſic, with which the times were proportioned in ſeſqui tierce, or from three to four. This rhime was repreſented by the foot, which the poets and grammarians call alſo epitrite, a foot com-

poſed of four ſyllables, the two firſt of which are effectually proportioned to the two laſt, as from three to four. (Vide rhime.)

EPOD. An air of the third couplet, which, in odes, terminated what the Greeks call the period, the which was compoſed of three couplets, viz. the ſtrophe, the antiſtrophe, and the epod. The invention of the epod was attributed to Archilochus.

EPTAMERIDES. A name given by Monſieur Sauveur to one of the intervals of his ſyſtem, lain out in the memoirs of the academy anno 1701. This author then divides the octave into forty-three parts, or merides, then each of thoſe into eptamerides, ſo that the intire octave comprehends three hundred and one eptamerides, which he again ſubdivides. (Vide decamerides.) This word is formed from ἑπτα, ſeven, and μέρις, part.

EPTAPHONIA. The name of a portico in the city of Olympia, in which they had managed an echo, which repeated the voice ſeven times together. There is a great appearance, that the echo was found there by chance, and that then the Greeks, quacks in their nature, have given the art of it to an architect.

EQUISONANCE. A name by which the ancients diſtinguiſhed the conſonances of the octave and double octave from the reſt, the only ones which form a paraphonia. As there has often been a want of the ſame diſtinction in modern muſic, we may make uſe of it with ſo much the leſs ſcruple, as the ſenſation of the octave is often confounded to the ear with that of the uniſon.

EUDROMOS. A name of the air which the hautboys played in the Sthenian games, inſtituted in Argos in honour of Jupiter. Hierax of Argos was the inventor of this air.

EQUAL. A name given by the Greeks to the ſyſtem of Ariſtoxenes, becauſe that author generally divided each of his tetrachords into thirty equal parts, a certain number of which he aſſigned to each of the three diviſions of the tetrachord according to the genus, and the nature of that genus, which he wiſhed to eſtabliſh. (Vide genus, ſyſtem.)

EVOVÆ. A barbarous word, formed of ſix vowels, which denote the ſyllables of the two words, ſeculorum amen, and which is only uſed in church muſic. It is on the letters of this word that we find marked in the pſalters and antiphonaries in the catholic churches, thoſe notes, by which, in each tone, and in the different modifications of the tone, we muſt terminate the ſtaves of the pſalms and cantics.

The evovæ always begins by the dominant of the tone of the antient, which precedes it, and always finiſhes by the final.

EUTHIA. A term of the Greek muſic, which ſignifies a continuance of notes proceeding from the flat to ſharp. The euthia was one of the parts of the ancient melopæa.

To EXECUTE. To execute a piece of muſic, is to ſing, and play all the parts which it contains, as well vocal as inſtrumental, in the unity which they ought to have; and to render it ſuch as it is pricked in the partition. As muſic is formed to be heard, we cannot judge well of it but by its execution. Such a partition appears admirable to the eye, which cannot be heard in its execution without diſguſt; and another may perhaps appear plain and ſimple to the eye, the execution of which delights by unexpected effects. Under-hand compoſers, attentive to give ſymmetry and play to all their parts, appear generally the moſt ingenious people in the world, whilſt we judge of their works only with the eye. Sometimes alſo they have the cunning to place ſo many different inſtruments, ſo many parts in their muſic, that we cannot, without great difficulty, collect together all the ſubjects neceſſary to execute it.

EXECUTANT. A muſician, who performs his part in a concert. It is the ſame thing as concertant. (Vide concertant.)

EXECUTION. The action of executing a piece of muſic. As muſic is generally compoſed of many parts, whoſe exact connection, whether for the intonation, or the meaſure, is very difficult to obſerve, and the ſtrength of which depends more on taſte than ſigns; nothing is ſo rare as a good execution. It is a trifle to read exactly the muſic by the notes; we muſt enter into all the ideas of the compoſer, feel and render the fire of the expreſſion, and have particularly an ear true, and always attentive to liſten and follow the concinnity. We muſt, in French muſic, particularly be careful, that the principal part underſtands the art of ſoftening or augmenting the movement, according to what the taſte in ſinging, the extent of the voice, and the action of the ſinger require. Conſequently, all the other parts muſt be confined, and attentive to the following of the former. The concinnous in the opera divided into parts, wherein the muſic has no other meaſure than that of the action, would be, in my opinion, the moſt admirable thing in execution.

"If the French (ſays St. Evremond) by their commerce with "the Italians, have attained the art of compoſing with more free-"dom; the Italians alſo have gained, by a commerce with the "French, in what they have learnt from them, the art of ren-"dering their execution more agreeable, more affecting, and "more perfect." The reader will, I imagine, diſpenſe with my commentary on this paſſage. I ſhall only add, that the French imagine the whole world to be employed in their muſic, while, on the contrary, in three parts of Italy, the muſicians do not even know that there exiſts a French muſic different from theirs.

We call alſo *execution* the facility of reading and executing an inſtrumental part; and we ſay, for inſtance, of a ſymphoniſt, that

he has great execution when he performs correctly, without hesitation, and at first sight, the most difficult things. Execution, taken in this sense, depends particularly on two things; first, from a perfect knowledge of the touch, and fingering of his instrument; and, secondly, from a long custom in reading music, and phrasing it at sight; for while we see separate notes, we always hesitate in the pronunciation; we acquire a great facility in execution, only by uniting them in the common sense which they ought to form, and in placing the thing itself in the place of the sign. 'Tis in this manner that the memory of the reader is not of less assistance than his eye, and that he would read with difficulty an unknown language, though written in the same characters, and composed of the same words, which he reads without hesitation in his own.

EXPRESSION. A quality, by which the musician has a lively feeling, and renders with energy all the ideas which he should utter, and all the sentiments which he should express. There is one expression in composition, and another in execution; and it is from their concurrence, that the most musical and most agreeable effect results.

To give expression to his works, the composer should seize and compare all the connections which may be found betwixt the strokes of his object and the productions of his art; he ought to know or feel the effect of every character, so that he may convey that which he has chosen to a degree suitable to it: for as a good painter does not give an equal light to all his objects, an ingenious musician should neither give the same energy to all his sentiments, or the same force to all his paintings; and should fix each part in its convenient place, not so much to give powers to it alone, as to afford a greater effect to the whole.

After having carefully sought what he should say, he then seeks the method how; and here begins the application of the precepts in that art, which was a particular language, in the which the musician wishes to make himself understood.

The melody, harmony, movement, and choice of instruments and voices, are the elements of musical language; and the melody, by its immediate connection with the grammatical and oratorical account, is that which gives the character to all the rest. Wherefore, it is always from the air that the principal expression should be drawn, as well in instrumental as vocal music.

That then what we endeavour to render by the melody is the tone, by which we express the sentiments which we wish to represent, and we ought to be very careful to imitate in that the theatrical declamation, which itself is no more than an imitation, but to follow the voice of nature, whose accents are without affectation, and without art. Wherefore the musician must first seek a kind of melody which may furnish musical inflexions, most convenient

venient to the ſenſe of the words, by always ſubordinating the expreſſion of the words to thoſe of the thought, and even thoſe to the ſituation of the ſoul of the ſpeaker; for when we are deeply affected, every diſcourſe which we hold takes a tint of the general ſentiment which reigns in us, and we do not quarrel in regard to what we love, in the ſame tone which agitates us in an indifferent matter.

Our words are differently accented according to the different paſſions that inſpire them; ſometimes ſharp and vehement, ſometimes careleſs and looſe; again varied and impetuous, and then equal and tranquil in its inflexions. From thence the muſician draws the difference of the modes in ſinging which he uſes, and of the different places in the which he maintains his voice; cauſing it to proceed in the lower parts by ſmall intervals, to expreſs the languor of ſorrow and melancholly, drawing from it, in the higher parts, ſharp ſounds from paſſion or grief, and conducting it rapidly through all the intervals of his diapaſon, in the agitation of deſpair, or the oppoſition of contraſted paſſions. We muſt particularly obſerve, that the charm of muſic does not conſiſt only in the imitation, but in an agreeable imitation, and that the declamation itſelf, to cauſe ſo great an effect, muſt be ſubordinate to the melody; ſo that we cannot paint a ſentiment without giving it that charm which is inſeparable from it, nor touch the heart, unleſs we pleaſe the ear. And this alſo is very conformable to nature, which gives the tone of ſenſible perſons an unknown affecting and delightful inflexion, which one without feeling can never inherit. Do not then attempt to take rhodomantade for expreſſion, or roughneſs for energy; neither give a frightful picture of the paſſions you wiſh to expreſs; and, in a word, do not, as in the French Opera, where the tone of paſſion is like to the cries from a cholic, much more than the accents of love.

The phyſical pleaſure which reſults from harmony, augments in its turn the moral pleaſure of the imitation, by uniting the agreeable ſenſations of the expreſſive concords of melody, on the ſame principle as I have juſt mentioned. But harmony does ſtill more: it enforces the expreſſion itſelf, by giving a greater juſtneſs and preciſion to melodious intervals; it animates their character, and ſpecifying exactly their place in the order of modulation, it recalls what preceded, denotes what ought to follow, and thus unites the phraſes in the air, as ideas are united in a diſcourſe. Harmony, examined in this manner, furniſhes the compoſer with variety in expreſſion, which eſcapes him when he ſeeks for expreſſion in one harmony alone; for then, inſtead of animating the accent, he ſtifles it by his concords; and all the intervals, confounded in a continued concourſe, offer nothing more to the ear than a continuance of fundamental ſounds, which have nothing affecting

affecting or agreeable, and whoſe effect has no impreſſion on our mind. What then muſt the harmoniſt do to form a concurrence with the expreſſion of the harmony, and give it a greater effect? He muſt be careful to avoid to cover the principal ſound in the combination of concords; he muſt ſubordinate all his accompanyments to the ſinging part; he muſt ſharpen the energy by the concurrence of the other parts; he muſt enforce the effect of certain paſſages by ſenſible concords; he muſt introduce others by ſuppoſition or ſuſpenſion, by counting them as nothing on the baſs; he muſt give freedom to the ſtrong expreſſions by major diſſonances, and muſt retain the minor for ſofter ſentiments. One while he muſt unite all his parts by continued and flowing ſounds; another while he will contraſt them in the air by ſharp notes. One while he will ſtrike the ear by full concords, and again enforce the accent by the choice of a ſingle interval. On every ſide he will render the union of modulation preſent and ſenſible, and will make the baſs and its harmony ſerve to determine the ſituation of each paſſage in the mode, ſo that we can never hear an interval, or ſtroke in ſinging, without feeling at the ſame time his connections with the whole.

In regard to the rhyme, formerly ſo powerful in giving force, variety, and taſte, to poetic harmony; if our languages, leſs accented, and leſs proſodic, have loſt the charm which reſulted from them, our muſic ſubſtitutes in its place, another more independant of the diſcourſe, in the equality of the meaſure, and in the different combinations of its times, whether in the whole at a time, or ſeparately in each part. The quantities of language are almoſt loſt under thoſe of the notes, and the muſic, inſtead of ſpeaking with the words, borrows, in ſome reſpect, a peculiar language from the meaſure. The force of the expreſſion conſiſts in the part, in re-uniting thoſe two languages as much as poſſible, and in being careful, that, if the meaſure and rhyme ſpeak not in the ſame method, they may at leaſt ſpeak the ſame things.

The vivacity, which gives a gaiety to all our movements, ought to give the ſame alſo to the meaſure. Sorrow confines the ſoul, ſoftens the movements, and the ſame languor is felt in the airs which it inſpires; but when the grief is lively, or when the ſoul is agitated by mighty combats, the words are irregular; its direction is alternate with the ſlowneſs of the ſpondee, and the rapidity of the pyrrhic, and is often retarded inſtantly as in the forced recitative. It is for this reaſon, that the moſt expreſſive muſic, or at leaſt the moſt paſſionate, is generally that wherein the times, though equal betwixt themſelves, are moſt unequally divided; whereas the image of ſleep, repoſe, peace of the ſoul, &c. are readily painted with equal notes, whoſe courſe is neither quick nor ſlow.

One

One obſervation, which the compoſer ought not to neglect, is, that the more the harmony is removed, the leſs lively the movement ſhould be; ſo that the mind may have time to catch the courſe of diſſonances, and the quick union in the modulations; it is only the laſt tranſports of paſſion which permit an alliance betwixt the rapidity of the meaſure and the roughneſs of the concords. Then when the ſenſes ſeem to vaniſh, and by dint of agitation the actor appears to have no more knowledge where he is, this energic diſorder may be encreaſed, ſo as to force its entrance into the ſoul of the ſpectator, and even render him inſenſible to every object. But unleſs you are ſublime and great, you muſt be cold and inſipid. Throw your audience into an inſenſibility, or be cautious not to fall into it yourſelf; for he who loſes his reaſon is nothing more than a madman in the eyes of thoſe who preſerve it, and madmen intereſt but little.

Though the greateſt force in expreſſion is drawn from the combination of ſounds, the quality of their tone is not indifferent to cauſe that effect. There are ſtrong and ſonorous voices, whoſe quality is good for a ſtrong impreſſion; others light and flexible, good for things of execution; and ſome ſenſible and delicate, which touch the heart by ſweet and pathetic ſounds. In general, the treble, and all ſharp tones, are proper for expreſſing tenderneſs and ſweetneſs; the baſs and concordant for tranſports of paſſion; but the Italians have baniſhed the baſs from their tragedies, as a part whoſe notes are too rough for the heroic genus; and have ſubſtituted in their places the tenor, whoſe note has the ſame character with a more agreeable effect. They uſe this ſame baſs more ſuitably in the comic for under parts, and generally for all profeſſionary parts.

Inſtruments alſo have very different expreſſions, according to the ſound, whether ſtrong or weak, whether the tone be ſharp or ſweet, the diapaſon ſharp or flat, and whether there can be drawn any ſounds in a greater or ſmaller quantity. The flute is tender, the hautboy gay, the trumpet warlike, the horn ſonorous, majeſtic, and proper for great expreſſion. But there is no inſtrument from which there can be drawn a more varied and univerſal expreſſion, than the violin. This admirable inſtrument forms the foundation of every orcheſtra, and ſuffices, to a great compoſer, to draw from it all the effects which a bad muſician ſeeks in vain in the alliance of different inſtruments. The compoſer ought to be acquainted with the handling the violin, to finger his airs, to diſpoſe his arpeggio's, to know the effect of the chords a vide, and to uſe and chooſe his tones according to the different characters which they have on this inſtrument.

It will be uſeleſs for the compoſer to have a knowledge of animating his work, unleſs the fire which ought to reign therein, is tranſmitted

tranſmitted to the ſoul of thoſe who execute it. The ſinger, who ſees the notes of his part only, is not in a condition of catching the expreſſion of the compoſer, or to give any to what he ſings, unleſs he has a true idea of the ſenſe. We muſt underſtand what we read to give a true comprehenſion of it to others, and it is not ſufficient to be ſenſible in general, unleſs we are particular alſo in regard to the energy of the language in which we ſpeak. Begin then by a complete knowledge of the character of the air which you are going to render, of its connection with the ſenſe of the words, the diſtinction of its phraſes, the accent which it has peculiar to itſelf, that which is ſuppoſed in the voice of the executant, the energy which the compoſer has given to the poet, and thoſe which in your turn you alſo can give the compoſer. Then relax your organs to all the fire that their conſiderations may have inſpired you with; do the ſame as you would, were you at the ſame time poet, compoſer, actor, and ſinger, and you will receive all the expreſſion that you can poſſibly give the work which you are about to perform. By this method it will naturally follow, that you muſt place delicacy, and ſuch ornaments in your airs, which can be but elegant and pleaſing; fire and ſharpneſs in thoſe which are gay and animated; ſighs and plaints in thoſe which are tender and pathetic; and the whole agitation of the forte piano, in the tranſports of violent paſſions throughout the whole, where the muſical accent is united to the oratorical, throughout the whole where the meaſure is ſenſibly felt, and ſerve as guides to the accents of ſinging, whereſoever the accompaniment and the voice can accord and unite the effects in ſuch a manner, that nothing dut melody reſults, and that the deceived audience attribute to the voice the paſſages with which the orcheſtra embelliſhes it; laſtly, whereſoever the ornaments, ingeniouſly managed, can bear witneſs of the facility of the ſinger, without covering and diſfiguring the air, the expreſſion will be ſweet, agreeable, and ſtrong; the ear will be delighted, and the heart moved; the phyſical and the moral will jointly concur to the pleaſure of the audience, and there will reign ſuch a concord betwixt the words and air, that the whole will appear to be only a delightful language, which can expreſs every thing, and always pleaſe.

EXTENT. The difference of two given ſounds, which have intermediaries, or the ſum of all the intervals compriſed betwixt the two extremes. Wherefore, the greateſt poſſible extent, or that which comprehends all the reſt, is that of all the ſenſible or perceptible ſounds from the flatteſt to the ſharpeſt, according to the experience of Monſieur Euler; all this extent forms an interval of about eight octaves, between a ſound which forms thirty vibrations by ſecond, and another which makes 7552 in the ſame time.

There

There is no extent in muſic between two terms, from which we may not inſert an infinity of intermediate ſounds, which divide it into an infinity of intervals; whence it follows, that the ſonorous, or muſical extent, is continually diviſible ad infinitum, as thoſe of time or place. (Vide interval.)

EXTENT OF THE VOICE. A grace in ſinging, which is marked by a ſmall note, called, in Italian, appoggiatura, and is practiſed by aſcending diatonically from one note to that which follows it, by an elevation in the throat.

EXTENT OF THE VOICE THROWN OUT, is formed when, aſcending diatonically from a note to its third, we fix the third note on the ſound of the ſecond; to make the third note only be felt by a redoubled elevation of the throat.

EXTENSION, is, according to Ariſtoxenes, one of the four parts of the melopæa, which conſiſts in ſuſtaining a long time certain ſounds, and even beyond their grammatical quantity. We at preſent call ſounds, thus ſuſtained, tenue, or lene.

---

# F.

FUT FA, F FA UT, or ſimply F. The fourth ſound of the natural and diatonic gamut, which is otherwiſe called fa. (Vide gamut.)

This is alſo the name of the loweſt of the three cleffs in muſic. (Vide cleff.)

FALSE. This word is in oppoſition to juſt. We ſing falſe when the intervals are not toned in juſtneſs, and that the ſounds are too high, or too low.

There are falſe voices, falſe chords, falſe inſtruments. In regard to voices, it is pretended, that the fault lies chiefly in the ear. I have, however, ſeen many people, who ſing very falſe, and, at the ſame time, tuned an inſtrument with very great juſtneſs. The fault in their voice had not then any effect in regard to the ear. As for inſtruments, when their tones are falſe, it is becauſe the inſtrument is ill conſtructed, that its ſtrings are ill proportioned, or the chords falſe, or out of concord; that he who plays touches falſely, or that he modifies the wind or lips ill.

FALSE CONCORD. Diſcordant accord, either becauſe it contains diſſonances, properly ſo called, or becauſe its conſonances are not juſt.

FALSE HUMMING. A piece of muſic in ſeveral parts, but ſimple, and without meaſure, whoſe notes are almoſt all equal,

and whoſe harmony is always ſyllabic. This is the pſalmody of the Roman Catholics ſung in many parts. The air of our pſalms, in four parts, may alſo paſs for a kind of falſe humming, but which proceeds with great gravity and flatneſs.

FALSE FIFTH. A diſſonant interval, called by the Greeks hemi diapente, whoſe two terms are four diatonic degrees diſtant, as well as thoſe of the true fifth, but whoſe interval is leſs by a ſemi tone; that of the fifth being of two major ſemi tones of a minor tone, and a ſemi tone major; and that of the falſe fifth only of a major tone, a minor, and of two ſemi tones major. If, on our ordinary keys, we divide the octave into two equal parts, we ſhall have on one ſide the falſe fifth, as ſi fa, and on the other the triton, as fa ſi; but theſe two intervals, equal in this ſenſe, are not ſo, either in the number of the degrees, ſince the triton has only three; or in the preciſion of the connections, that of the falſe fifth being from forty-five to ſixty-four, and that of the triton from thirty-two to forty-five.

The concord of falſe fifth is changed from the dominant accord, by placing the ſenſible note in the flat. (Vide at the word concord how this is accompanied.)

FALSE RELATION. A diminiſhed or ſuperfluous interval. (Vide relation.)

FANTASY. A piece of inſtrumental muſic, which is executed when compoſed. There is this difference betwixt the caprice and the fantaſy; that the caprice is a collection of ſingular and droll ideas collected by a warm imagination, and which may even be compoſed at leiſure; whereas the fantaſy may be a very regular piece, which differs from the reſt only that it is invented in its execution, and that it has no longer exiſtence as ſoon as it finiſhed. Wherefore, the caprice conſiſts in the nature and aſſortment of ideas, and the ideas in their quickneſs in preſenting them. It follows thence, that a caprice may be very well written, but never a fantaſy; for as ſoon as it is written or repeated, it is no longer a fantaſy, but an ordinary piece.

FEIGNED TREBLE, is that kind of voice, by which a man, leaving the ſharp of the diapaſon of his natural voice, imitates that of a woman. A man, when he ſings the feigned treble, does almoſt the ſame thing as a pipe of the organ when it plays in octave.

FESTA. A diverſion of ſinging or dancing, which is introduced in the act of an opera, and which interrupts or always ſuſpends the action.

Theſe feſta are only amuſing, in compariſon with the tireſomeneſs of the opera. In an intereſting drama, when well conducted, it would be almoſt impoſſible to endure them.

The

The feſta are applied more particularly to tragedies, and diverti ſſements to ballets.

FI. A ſyllable by which many muſicians mark the fa dieſis, as they do the ma by mi B flat, which appears, I imagine, ſufficiently clear.

FIFTH. The ſecond of the conſonances in the order of their generation. The fifth is a perfect conſonance. (Vide conſonance.) Its ſound is connected as from two to three. It is compoſed of four diatonic degrees, coming to the fifth ſound, from whence it has its name of fifth. Its interval is of three tones and a half, viz. two major tones, a minor tone, and a major ſemi tone.

The fifth may be changed in two ways, viz. by diminiſhing its interval a ſemi tone, and then it is called falſe fifth, and ſhould be ſtiled diminiſhed fifth; or by increaſing the ſame interval a ſemi tone, and then it is called ſuperfluous fifth; ſo that the ſuperfluous fifth has four tones, and the falſe fifth three only, as the triton, from which, in our ſyſtem, it only differs by the number of degrees. (Vide falſe fifth.)

There are two concords which bear the name of fifth, viz. the concord of fifth and ſixth, which is alſo called greater ſixth, or ſixth added, and the concord of ſuperfluous fifth. The firſt of theſe two concords is conſidered two ways, i. e. as a change from the concord of ſeventh, the third of the fundamental ſound being conveyed to flat; this is the concord of greater ſixth. (Vide ſixth.) Or as a direct concord, whoſe fundamental ſound is in flat, and it is then the concord of ſixth added. (Vide double emploi.)

The ſecond is alſo conſidered two ways, the one by the French, the other by the Italians. In the French harmony the ſuperfluous fifth is the dominant concord in the minor mode, below which we make the mediant be heard, which forms a ſuperfluous fifth with the ſenſible note. In the Italian harmony, the ſuperfluous fifth is uſed only on the tonic in the major mode, when, by chance, the fa is dieſis'd, forming then major third on the mediant, and conſequently ſuperfluous fifth on the tonic. The principle of this concord, which appears to go out of the mode, may be found in the expoſition of Monſieur Tartini's ſyſtem. (Vide ſyſtem.)

It is forbid in compoſition to make two fifths together, by a ſimilar movement between the two parts; this would diſguſt the ear, by forming a double modulation.

Monſieur Rameau pretends to give a reaſon for this rule, by a default of union between the concords. He is deceived. In the firſt place then, two fifths may be formed, and the harmonic union preſerved. Secondly, with this union the two fifths are ſtill ill. Thirdly, we muſt, on the ſame principle, extend, as in other

places, the rule to the major thirds, which is not, and ought not to be. It does not belong to our hypotheſis' to act contrary to the judgment of the ear, but only to give reaſon for them.

Falſe Fifth, is a fifth counted juſt in harmony, but which by the force of modulation, is found to be weakened a ſemi-tone. Such is generally the fifth of the concord of ſeventh on the ſecond note of the tone in the minor mode.

The Falſe Fifth is a diſſonance which muſt be prevented, but the fifth falſe may paſs as a conſonance, and be treated as ſuch, when we compoſe in four parts.

FIFTH, Is alſo the name given in France to that inſtrumental part of the whole, which in Italian is called Viola. The name of this part has paſſed alſo to the inſtrument which plays it, viz. Quinte.

FIFTEENTH. An interval of two octaves. (Vide DOUBLE OCTAVE.)

To FIGURE, Is to paſs many notes for one; to form doubles, variations; to add notes to the muſic in any manner whatſoever; laſtly, 'tis to give the harmonious ſounds a figure of melody, in uniting them by other intermediate ſounds. (Vide DOUBLE, FIGURED HARMONY, &c. &c.)

FIGURED. This adjective is applied either to the notes or harmony; to the notes as in this word, Figur'd-baſs, to expreſs a baſs, whoſe notes bearing a concord, are divided into many other notes of leſs powers. (Vide Figured Baſs) To the harmony, when by ſuppoſition, and in a diatonic direction, we make uſe of other notes than thoſe which form the concord. (Vide FIGURED HARMONY and SUPPOSITION.

FINAL. The principal chord of the mode which is alſo called Tonic, and on which the air or piece ought to finiſh. (Vide MODE.)

When we compoſe in many parts, and particularly in chorus, the baſs muſt always fall by finiſhing exactly on the note of the Final: the other parts may ſtop on the third or fourth. Formerly it was a rule always given at the end of a piece, the major third muſt be in final, even in the minor mode. But this cuſtom has been found deficient in taſte, and entirely aboliſhed.

FINIS. This word is ſometimes placed on the final of the firſt part of a rondeau, to denote, that having retaken this firſt part, 'tis on this final we muſt ſtop and finiſh. (Vide RONDEAU.)

This word is no longer uſed in that ſenſe, the French having ſubſtituted in its place, the Final Point, according to the example of the Italians. (Vide FINAL POINT.)

To FINGER, Is to direct the fingers in a convenient and regular manner on any inſtrument, and chiefly on the Organ or the Harpſichord, to play on it with the moſt eaſe and ſkill poſſible.

On

On inſtruments for the breaſt, ſuch as the violin, and violencello, the principal rule of fingering conſiſts in the different poſitions of the left hand on the ſleeve; it is by this means that the ſame paſſages may become eaſy or difficult, according to the poſitions and chords, on the which we may take theſe paſſages; it is, when a ſymphoniſt has attained to the art of paſſing nimbly with juſtneſs and preciſion through all theſe different poſitions, that we ſay he is expert in the ſleeve. (Vide Poſition.)

On the organ and harpſichord, the fingering is entirely different. There are two methods of playing on theſe inſtruments, viz. the accompaniment and pieces. To play the pieces, we pay attention to the facility of the execution, and to a pleaſing grace of the hand. As there are an exceſſive number of poſſible paſſages, the greater part of which require a particular way of directing the fingers; and ſince, beſides each country and each maſter has his rule, there would be required on this part ſuch details as this work would not permit, and in which cuſtom and convenience take place of rules, when once the hand is properly fixed. The general precepts which may be given, are, firſt, to place both hands on the keys in ſuch a manner, as to have nothing inconvenient in the attitude, which obliges us generally to exclude the thumb of the right hand; becauſe the two thumbs placed on the keys, and principally on the white, would give the arms a ſituation conſtrained, and by no means graceful. We muſt alſo take notice, that the elbows ſhould be a little raiſed above the edge of the keys, ſo that the hand may fall of itſelf as it were on them, which depends on the height of our ſeat. Secondly, we muſt hold the wriſt nearly at the height of the keys, i. e. on a level with the elbow: the fingers muſt be removed from the breadth of the keys which are to be touched, ſo that they may be in readineſs to fall on different ones in their turn. Thirdly, we muſt not ſucceſſively convey the ſame finger on conſecutive keys, but make uſe of all the fingers of each hand: Add to theſe obſervations the following rules, which I boldly offer, ſince I have them from Monſieur Dupli, an excellent maſter on the harpſichord, and who profeſſes a perfect knowledge of fingering.

This perfection conſiſts in general in a ſoft, eaſy, and regular movement. The movement of the fingers is taken from their root, that is, from the joint which fixes them to the hand.

The fingers muſt be naturally bent, and each finger muſt have its proper movement, independantly from the reſt. The fingers muſt fall on the keys, and not ſtrike them; and, moreover, muſt flow one from the other in a ſucceſſion, that is, we muſt not leave one key before we have fixed on another. This chiefly regards the French methods of playing.

To continue a ſhake, we muſt uſe ourſelves to paſs the thumb below any finger whatſoever, and to paſs any other finger below the thumb. This method is excellent, particularly when we meet with dieſis', or B's flat: then be careful that the thumb be fixed on the key which precedes the dieſis, or B flat, or place it immediately after: by this means you will gain as many fingers together as you will have notes to form.

Avoid, as much as poſſible, to touch a white key with the thumb, or fifth finger, particularly in very quick ſhakes.

The ſame ſhake is often executed with the two hands, the fingers of which, in that caſe, ſucceed each other ſucceſſively. In theſe ſhakes the hands paſs one on the other, but we muſt take notice, that the ſound of the firſt key, on which one of theſe hands paſſes, muſt alſo be united to the precedent ſound, as much as if they had been touched by the ſame hand.

In the harmonious and united kind of muſic, it is neceſſary to uſe ourſelves to ſubſtitute one finger in the place of another, without raiſing the key. This method gives facility in the execution, and prolongs the duration of the ſounds.

For the accompaniment, the fingering of the left hand is the ſame as for the pieces, becauſe that hand muſt always play the baſs which is to be accompanied; wherefore the rules of Monſieur Duphli ſerve equally for that part, except on occaſions when we wiſh to augment the noiſe by means of the octave, on which we fix the thumb and little finger; for then, inſtead of fingering, the entire hand is conveyed from one part to another. In regard to the right hand, its fingering conſiſts in the arrangement of the fingers, and in the direction given to them, to make the concords and their ſucceſſion be heard; ſo that whoſoever hears well the mechaniſm of the fingers in this part, poſſeſſes the art of accompaniment. Monſieur Rameau has very well explained that mechaniſm in his Diſſertation on the Accompaniment, and I think I cannot do better than give here an extract of that part of the diſſertation which regards the fingering.

Every concord may be arranged by thirds. The perfect concord, i. e. the concord of a tonic, thus ranged on the keys, is formed from three touches, which ought to be ſtruck with the ſecond, third, and fifth finger. In this ſituation, it is the loweſt finger, that is, the ſecond which touches the tonic; in the two other caſes, there is always found a finger leſs below that ſame tonic. It muſt be placed in the fourth. In regard to the third finger, which is fixed above or below the two others, it muſt be placed in tierce in its turn.

A general rule for the ſucceſſion of concords is, that there ſhould be an union between them; that is to ſay, that ſome one of the ſounds of the preceding concord ſhould be prolonged on the following concord, and enter into its harmony. It is from this rule that the whole mechaniſm of the fingering is drawn. Since to paſs regularly from one concord to another, ſome finger muſt remain in its place. It is evident, that there are only four methods of regular ſucceſſion between two perfect concords, viz. the fundamental baſs aſcending or deſcending from third or fifth.

When the baſs proceeds by thirds, two fingers remain in their place; in aſcending, thoſe which formed the third and fifth remain the octave and third; whereas, that which formed the octave, deſcends on the fifth. In deſcending, the fingers which formed the octave and third, remain to form the third and fifth; whilſt that which formed the fifth aſcends on the octave.

When the baſs proceeds by fifth, one finger only remains in its place, and the two others take their courſe; in aſcending, it is the fifth which remains to form the octave, whilſt the octave and third deſcend on the third and fifth; in deſcending, the octave remains to form the fifth, whilſt the third and fifth aſcend on the octave, and on the third. In all theſe ſucceſſions the two hands have always a contrary movement.

By exerciſing ourſelves on different parts of the keys, we are ſoon familiarized to the play of the fingers on each of theſe courſes, and the continuance of perfect concords can be no longer embarraſſing.

In regard to the diſſonances, we muſt firſt take notice, that every compleat diſſonant accord employs the four fingers, all of which may be arranged by thirds, or three by thirds, and the other joined to ſome one of the firſt, forming with it an interval of ſecond. In the firſt caſe, it is the loweſt of all the fingers, i. e. the index which expreſſes the fundamental ſound of the concord; in the ſecond caſe, it is the higheſt of the two joined fingers. By this obſervation, we eaſily know the finger which forms the diſſonance, and which conſequently ought to deſcend to prevent it.

According to the different conſonant or diſſonant accords, which follow a diſſonant accord, we muſt make one or two fingers deſcend, or three at the end of a diſſonant accord; and the perfect concord which prevents it, is eaſily found under the fingers. In a courſe of diſſonant accords, when one finger alone deſcends, as in the interrupted cadence, it is always that which has formed the diſſonance; that is to ſay, the lower of the two joined, or the higher of all, if they are arranged by thirds. Should we make two fingers deſcend, as in the perfect cadence, add to that which I have

mentioned, its neighbour below, and if there is none, the higheſt of all, thoſe are the two fingers which ought to deſcend. Should three deſcend, as in the broken cadence, preſerve the fundamental on its key, and make the three others deſcend.

The courſe of all theſe different ſucceſſions, well ſtudied, ſhews you the play of the fingers in all poſſible phraſes; and as it is from perfect cadences that the moſt common ſucceſſion of harmonic phraſes is drawn, it is alſo in that that we muſt exerciſe ourſelves moſt: we ſhall always find there the fingers directed, and ceaſing alternately. If the two higher fingers deſcend on a concord where the two lower remain in their place, in the following concord the two higher remain, and the lower deſcend in their turn; or at leaſt, they are the two fartheſt fingers which form the ſame play with the two middle.

We may alſo find an harmonic ſucceſſion aſcending by diſſonances, by favour of the ſixth added, but this ſucceſſion, leſs common than that I have ſpoken of, is more difficult to manage, leſs prolonged, and the concords ſeldom are filled with all their ſounds. The courſe of the fingers ſhould have rules herein always, and, by ſuppoſing an union of imperfect cadences, we ſhould always find either the four fingers by thirds, or the two fingers joined. In the firſt caſe, it would be to the two lower to aſcend, and then to the two higher alternately; in the ſecond, the higher of the two fingers joined, ought to aſcend with that that is above it; and if there is none, with the loweſt of all, &c. &c. &c.

It cannot be imagined, to what a length the ſtudy of fingering, taken in this method, may facilitate the practice of the accompaniment. After a little exerciſe, the fingers take inſenſibly the cuſtom of directing themſelves as it were voluntarily; they prepoſſeſs the mind, and accompany with a facility which has ſomething aſtoniſhing. But we muſt confeſs, that the advantage of this method is not without its inconveniencies; for, without mentioning the octaves and fifths together, which are met with every moment, there reſults from all this concourſe a rough and diſagreeable harmony, with which the ear is ſtrangely diſguſted, particularly in concords by ſuppoſition.

Maſters teach other methods of fingering, founded on the ſame principles, ſubject, it is true, to more exceptions, but by which, cutting off the ſounds, we hurt the hand leſs; by a too great extenſion we avoid the octaves and fifths together, and we produce a harmony not ſo full, but more pure, and more agreeable.

FIXED. Stable chords or ſounds are called fixed. (Vide Sound, Stable.)

FLAT is oppoſed to ſharp. The ſlower the vibrations of a corpo ſonoro are, the more flat the ſound is. (Vide Sound, Gravity.)

FLATTE.

FLATTE. A grace in the French ſinging, difficult to be defined, but whoſe effect will be ſufficiently underſtood by an example under the word Accent.

FLEURTIS. A kind of figured counterpoint, which is not ſyllabic, or note upon note. It is alſo the collection of different graces, with which a ſimple air is adorned. This word is now aboliſhed in every ſenſe. (Vide Double, Variations, &c.)

FLOURISH. A kind of military air, generally ſhort and pleaſing, which is performed with trumpets, and imitated on other inſtruments. The flouriſh is generally with two trebles of trumpets, accompanied by tymbals, and when well executed, has ſomething martial and gay, which is very ſuitable to its uſe. Of all the European troops, the Germans have the beſt military inſtruments, and their marches and flouriſhes have an admirable effect. It is a remarkable thing, that throughout the whole kingdom of France, there is not one trumpet which ſounds true; and the moſt warlike nation in Europe, has the moſt diſcordant military inſtruments, which is certainly attended with inconveniencies. During the laſt wars, the peaſants of Bohemia, Auſtria, and Bavaria, all muſicians born, not being able to think that regular troops had inſtruments ſo falſe, took thoſe old ſoldiers for new recruits, whom they began to look on with contempt; and it cannot be imagined, how many brave men loſt their lives on account of their diſcordant muſic. So true it is, that in the preparation of war, nothing ſhould be neglected which may ſtrike the ſenſes.

FLOURISHES. This is ſaid in muſic of ſeveral notes which the muſician adds to his part in the execution; to vary an air often repeated, to adorn a too ſimple paſſage, or to give a brightneſs to the volubility of his throat or fingers. Nothing can better ſhew the good or ill taſte of a muſician, than the choice and uſe he makes of theſe ornaments. The vocal French muſic is very cautious in regard to flouriſhes; it even becomes more ſo every day; and if we except the celebrated Jeliote and Mademoiſelle Fel, no French actor will now run the hazard of flouriſhing on the ſtage; for the French airs having of late years taken a more regular and lamentable tone, will no longer permit it. The Italians go the greateſt lengths; amongſt them there are contentions who ſhall extend it fartheſt; an emulation which always leads them to too great a height. However, the accent of their melody being very ſenſible, they need not fear that the true air ſhould diſappear under theſe ornaments which the author himſelf has often ſuppoſed.

In regard to inſtruments, we do as we pleaſe in a ſolo, but a flouriſhing ſymphoniſt could not be ſuffered in a good band.

FOOT.

FOOT. A meaſure of time, or quantity, diſtributed into two or more equal or unequal powers. There was in ancient muſic this difference between the times and feet, that the times were, as the points or elements, indiviſible, and the feet the firſt compoſed of theſe elements. The feet, in their turn, were the elements of the metre or rhime.

There were ſimple feet, which could only be divided into times, and others compoſed, which might be divided into other feet, as the Choriambic, which might be reſolved into a trochee and a Iambic, the Ionic into a pyrrhic and a ſpondee.

There were rhimic feet, whoſe relative and determined quantities were proper to eſtabliſh agreeable connections, as equal, doubles, ſeſquialters, ſeſqui-thirds, &c. and others not rhimic, between which the references were vague, uncertain, little ſenſible, ſuch, for inſtance, as might be formed from French words, which, from ſhort or long ſyllables, have an infinity of others, without a determined power; or which, long or ſhort in grammar rules only, are not judged as ſuch, either by the ear of the poet, or by the practice of the people.

FORCE. The quality of a ſound, called alſo ſometimes Intenſity, which renders it more ſenſible, and heard at a greater diſtance. The more or leſs frequent vibrations of a ſonorous body, are what render the ſound ſharp or flat; its greateſt or leaſt diſtance from the line of the ſtop, is what renders it ſtrong or weak. When this diſtance is too great, and the inſtrument or voice is forced, (vide To force) the ſound becomes a noiſe, and ceaſes to be agreeable.

TO FORCE THE VOICE, is to exceed its diapaſon, high or low, or its extent by force of the breath; or ſcreaming inſtead of ſinging. Every forced voice loſes its juſtneſs; this even happens to inſtruments where the fiddle-ſtick or the wind is forced, and it is for this reaſon that the French ſeldom ſing true.

FORLANE. The air of a dance of the ſame name, common in Venice, particularly amongſt the Gondoliers. Its meaſure is $\frac{6}{8}$; it is beaten gailey, and the dance alſo is very lively. It is called Forlane, becauſe it takes its origin in Frioul, whoſe inhabitants are called Forlans.

FORTE. This word is written in the parts to denote, that the ſound muſt be forced with vehemence, but without raiſing it, ſung in full voice, and much ſound be drawn from the inſtrument; or ſometimes it is uſed to deſtroy the effect of the word dolce, uſed precedently.

The Italians have ſtill the ſuperlative fortiſſimo, which is not at all wanted in the French muſic, for they generally ſing fortiſſimo without any direction.

FORTE

FORTE PIANO. An Italian ſubſtantive compoſed, and which the muſicians ought to frenchify, as the painters have chiar-ſcuro, by adopting the idea which it expreſſes. The forte piano is the art of ſweetning and enforcing the ſounds in imitative melody, as we do in the words which it ought to imitate. Not only when we ſpeak with paſſion, we do not always expreſs ourſelves in the ſame tone, but we do not always ſpeak even with the ſame degree of force. Muſic, by imitating the variety of the accents and tones, ought alſo to imitate the intenſe or remiſs degrees of the words, and ſpeak one while dolce, another while forte, ſometimes a demi voice, and this is what the word forte piano generally expreſſes.

FOURTH. The third of the conſonances in the order of their generation. The fourth is a perfect conſonance; its connection is from three to four: it is compoſed of three diatonic degrees formed by four ſounds, from whence it receives its name of fourth. Its interval is of two tones and a half, viz. a major tone, a minor, and a major ſemi-tone.

The fourth may be changed two ways, i. e. by diminiſhing its interval a ſemi-tone, and then it is called diminiſhed fourth, or falſe fourth; or by augmenting the ſame interval a ſemi-tone, and it is then called ſuperfluous fourth, or triton, becauſe its interval has three full tones: it has only two tones, that is, one tone, and two ſemi tones in the diminiſhed fourth; but this laſt interval is baniſhed from the harmony, and only practiſed in an air.

There is a concord which has the name of fourth, or fourth and fifth. Some call it concord of eleventh. It is that, where, under a concord of ſeventh, we ſuppoſe a fifth ſound in the baſs, a fifth below the fundamental; for in that caſe, this fundamental forms a fifth, and its ſeventh has an eleventh with the ſuppoſed ſound. (Vide Suppoſition.)

Another concord is called ſuperfluous fourth, or triton. It is a ſenſible concord, whoſe diſſonance is conveyed to the baſs; for in that caſe the ſenſible note forms a triton on that diſſonance. (Vide Concord.)

Two true fourths together are permitted in compoſition, even by a ſimilar movement, provided the ſixth be added; but thoſe are paſſages which muſt not be uſed wrong, and which the fundamental baſs does not abſolutely authoriſe.

FOURTEENTH. A replique, or octave of the ſeventh. This interval is called fourteenth, becauſe fourteen ſounds muſt be found to paſs diatonically from one of its terms to another.

FRAGMENTS. By this name is called in the opera of Paris, the choice of three or four acts of ballet, which are taken from different operas, and collected together, though they have no connection

nection betwixt themſelves, to be repreſented ſucceſſively the ſame day, and with their interludes, equal the duration of an ordinary ſpectacle. There is no man born with taſte who can form any idea of ſuch a mixture, and no theatrical and intereſting piece which can permit it.

FREDON. An ancient word, which ſignifies a quick paſſage, and generally diatonic of many notes on the ſame ſyllable. This is nearly what has been ſince called trill, with this difference, that the trill has a longer duration, and is written, whereas the Fredon is only a ſhort addition in taſte, or, as it was formerly called, a diminution, which the finger makes on each note.

FUGUE. A piece of muſic, wherein we treat, according to certain rules of harmony and modulation, an air called ſubject, by making it paſs ſucceſſively and alternately from one part to another.

There are the principal rules of the fugue, the one of which are proper to it, and the other common with the imitation.

I. The ſubject proceeds from the tonic to the dominant, or from the dominant to the tonic, in aſcending or falling.

II. Every fugue has its anſwer in the part, which immediately follows that which has begun.

III. This anſwer ought to return the ſubject to the fourth or fifth, and by a ſimilar movement, as exactly as poſſible proceeding from the dominant to the tonic, when the ſubject is announced from the tonic to the dominant, and vice verſa. One part may alſo retake the ſame ſubject in the octave, or in the uniſon of the precedent; but in that caſe it is a repetition rather than a true anſwer.

IV. As the octave is divided into two unequal parts, the one of which comprehends four degrees in aſcending from the tonic to the dominant, and the other only three. This obliges us to have attention to that difference in the expreſſion of the ſubject, and to make ſome change in the anſwer, not to quit the eſſential chords of the mode. It is another thing when we propoſe to change the tone; in that caſe, the exactneſs of the anſwer itſelf, taken on another chord, produces alterations ſuitable to this change.

V. The fugue muſt be deſigned in ſuch a manner, as, that the anſwer may enter before the end of the firſt air, that we may hear each of them in part at a time, that by this anticipation the ſubject may be united, as it were, to itſelf; and that the art of the compoſer may be ſhewn in this collection. It is a joke to give as a fugue, an air, which only paſſes from one part to another, without any other difficulty than accompanying it immediately. This, at moſt, deſerves only the name of imitation. (Vide Imitation.)

Beſides

Beſides theſe rules, which are fundamental, to ſucceed in this kind of compoſition, there are others, which, tho' only for taſte, are not leſs eſſential. The fugues, in general, render the muſic more noiſy than agreeable; for which reaſon, they are more ſuitable in choruſſes than any where elſe. Moreover, as their chief merit is to fix the ear always on the principal air or ſubject, ſince, on that account, we make them paſs inceſſantly from part to part, and from modulation to modulation, the compoſer ſhould be particularly careful to render this air always very diſtinct, or to hinder its being ſtifled or confounded amongſt the other parts. There are two methods for this; one in the movement, which muſt be continually contraſted, ſo that, if the courſe of the fugue is precipitate, the other parts precede alſo by long notes; and, in the contrary, if the fugue is directed flatly, the accompaniments labour more: the other method is to ſeparate the harmony, leſt the other parts, approaching too near to that which ſings the ſubject, ſhould be confounded with it, and prevent its being heard clearly, ſo that what would be reckoned a fault every where elſe, becomes a beauty here.

*An Unity of Melody.* Here is the grand rule to be practiſed often by different methods. We muſt chuſe the concords, the intervals, ſo that a certain ſound, and not an indifferent one, may cauſe the principal effect, viz. an unity of melody. We muſt ſometimes put into play, inſtruments or voices of a different kind, ſo that the part which ſhould predominate may be more eaſily diſtinguiſhed, viz. an unity of melody. Another obſervation, not leſs neceſſary, is, in the different unions of modulations, which the force and progreſs of the fugue bring with them, to take care that all theſe modulations be correſpondent, at the ſame time, in all their parts; to unite the whole in its progreſs by an exact conformity of tone, for fear that one part being in one tone, and another in another, the entire harmony ſhould be in neither; and ſhould not preſent any ſimple effect to the ear, or ſimple idea to the mind, viz. an unity of melody. In a word, in every fugue, the confuſion of melody and modulation is what, at the ſame time, is moſt to be feared, and the moſt difficult to be avoided; and the pleaſure which this kind of muſic produces, being always middling, we may ſay, that a good fugue is the unrepaid chef-d'œuvre of a good harmoniſt.

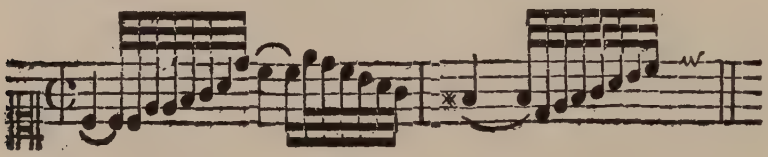
There are alſo ſeveral other kinds of fugues, as the perpetual fugues, called canons; the double fugues, the counter fugues, each of which may be ſeen under its title, and, which ſerve more to extend the art of compoſers, than to pleaſe the ear of an audience.

Fugue is from the Latin fuga, flight; becauſe the parts ſetting off ſo ſucceſſively, ſeem to fly and purſue each other.

CONFUSED FUGUE, Is that whoſe anſwer is made by a movement contrary to that of the ſubject.

FULL PLAY, Is ſaid of the play of an organ, when all the regiſters are fixed, and the whole harmony is filled; it is ſaid alſo of bow inſtruments, when we draw from them all the ſound which they can give.

FURCE, A quick and continued ſtroke, which aſcends or falls to join two notes diatonically to a great interval, one from the other, thus:



Unleſs the furce be noted, it is neceſſary, for its execution, that one of the two extreme notes have a duration, on which the furce may be paſſed without changing the meaſure.

# G.

GRE SOL, G SOL RE UT, or ſimply G, The fifth ſound of the diatonic gamut, which otherwiſe is called ſol. (Vide Gamut.)

It is alſo the name of the higheſt of the three muſical cleffs. (Vide Cleff.)

GAI, This word written above an air, or a piece of muſic, denotes a middle movement between the quick and moderate: it anſwers to the Italian word, Allegro, uſed in the ſame ſenſe. (Vide Allegro.)

This word may alſo be underſtood of a character of muſic, independantly of the muſic.

GAILLARD, A three-tim'd air, belonging to a lively dance of the ſame air. It was formerly called Romaneſque, becauſe, according to report, it is derived from Rome, or, at leaſt, from Italy.

This dance has been out of uſe ſome time. There is only a ſtep of it that remains, called, "The Gaillard ſtep."

GAMUT, A table or ſcale, invented by Gui Aretin, on the which we learn to name and ſound juſtly the degrees of the octave by the ſix notes of muſic, ut, re, mi, fa, ſol, la, according to all the diſpoſitions that can be given them, which is called in French ſolfier, to ſol fa. The

The gamut has alſo been ſtiled an harmonic hand, becauſe Gui made uſe of the figure of a hand, on the fingers of which he ranged his notes, to ſhew the connections of his hexachords with the five tetrachords of the Greeks.

This hand has been in uſe to teach to name the notes, till the invention of ſi, which aboliſhes the diviſions amongſt us, and, conſequently, the harmonic hand which ſerves to explain them.

Gui Aretin having, according to the general opinion, added to the diagram of the Greeks a tetrachord in ſharp, and a chord in flat, or rather, according to Meibornius, having, by theſe additions, eſtabliſhed this diagram in its ancient extent, he called that flat chord hypropoſlambanomenos, and marked it by the Γ of the Greeks; and as this letter was found thus at the head of the ſcale, by placing the flat ſounds above, according to the method of the ancients, it cauſed the name of gamut to be given to this ſcale.

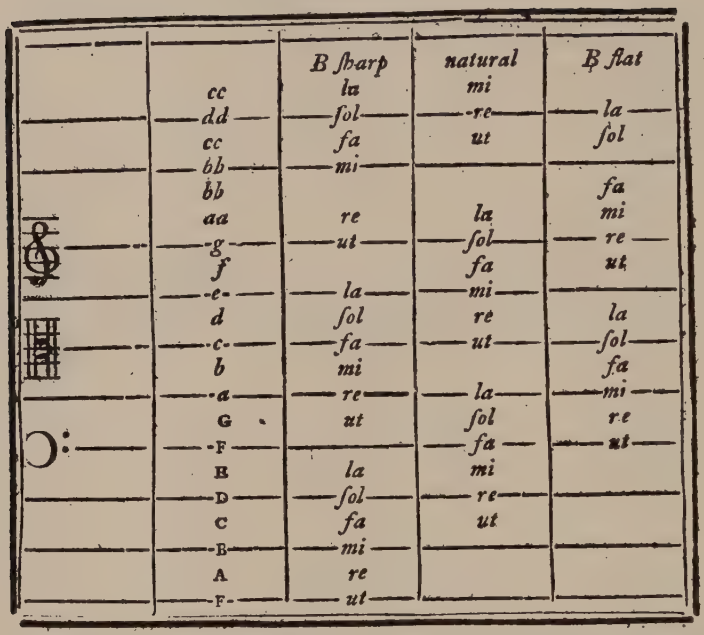
This gamut then, in the whole of its extent, was compoſed of twenty chords or notes, viz. of two octaves and a major ſixth. Theſe chords were repreſented by letters and ſyllables. The letters invariably diſtinguiſhed each a determined chord of the ſcale, as they do at preſent; but as there were then but ſix letters, that there might be ſeven, and as it was neceſſary to re-begin from octave to octave, they diſtinguiſhed theſe octaves by the figures of letters. The firſt octave was marked with capital letters, in this manner, Γ. A. B. &c. The ſecond, in running-hand, g. a. b. And for the ſupernumerary ſixth, they uſed double letters, gg. aa. bb. &c.

In regard to the ſyllables, they only repreſented the names which were to be given to the notes in ſinging. Moreover, as there were only ſix names for ſeven notes, it was through neceſſity that one name was given to two different notes; which was managed in ſuch a manner, as that theſe two notes, mi, fa, or la, fa, ſhould fall on ſemi-tones. Conſequently, as ſoon as a dieſis or a B flat preſented itſelf, which brought a new ſemi-tone, the names were to be again changed, which cauſed the ſame name to be given to different notes, and different names to the ſame note, according to the progreſs of the air: and theſe changes of the name were called diviſions.

Theſe diviſions were then learned by the gamut. At the left of each degree, we ſaw a letter, which denoted preciſely the chord belonging to that degree. On the right, in the caſes, we found the different names which that note might bear, in riſing or deſcending by B ſharp, or B flat, according to the progreſs.

The difficulties of this method have cauſed different changes to be made in the gamut at ſeveral times. This plate repreſents the gamut as it is now uſed in Italy.

## *The* Italian Gamut.




It is nearly the ſame thing in Spain and Portugal, unleſs that the column of B ſharp is ſometimes found in the laſt place, which here is the firſt, or ſome other difference of as little ſignification.

To make uſe of this ſcale, if we will ſing in natural, we apply ut to Γ. of the firſt column, the length of which we aſcend as far as la, after which, paſſing to the right in the column of B natural, we name fa; we aſcend to la of the ſame column, and then return in the precedent to mi, and ſo in continuance. Or indeed, we may begin by ut at the C of the ſecond column, and when arrived at la, paſs to mi in the firſt column, and then repaſs in the other column to fa. By this method, one of theſe tranſitions always forms a ſemi-tone, viz. la, fa; and the other, always a tone, viz. la mi. By B flat, we may begin at the ut in c or f, and form the tranſitions in the ſame manner, &c.

In deſcending by B ſharp, we quit the ut of the column in the middle, to paſs to mi from that of the B ſharp, or to fa from that of B flat; then, deſcending as far as ut of that new column, we go out by fa from the left to the right, by mi from right to left, &c.

The

The Engliſh do not make uſe of all the ſyllables, but only the four firſt, ut, re, mi, fa, changing thus the column every four notes, or every three, by a method ſimilar to that which I have juſt explained, unleſs in the place of la, fa, and la, mi, we muſt move in fa, ut, and mi, ut.

The Germans have no other gamut than the initial letters, which expreſs the fixed ſounds in the other gamuts, and they even ſol fa with thoſe letters.

The French gamut, otherwiſe called gamut of ſi, prevents the embarraſſment of all theſe tranſitions. It conſiſts in a ſimple ſcale of ſix degrees on two columns, beſides that of the letters.

*The* French Gamut.

| | | |
|---|---|---|
| *E* | *ſi* | *mi* |
| *D* | *la* | *re* |
| *C* | *ſol* | *ut* |
| *B* | *fa* | *ſi* |
| *A* | *mi* | *la* |
| *G* | *re* | *ſol* |
| *F* | *ut* | *fa* |

The firſt column on the left is to be ſung by B flat, that is, with a B flat in the cleff. The ſecond is ſung in natural. Here lies all the myſtery of the French gamut, whoſe difficulty is as trifling as its uſe, ſince every other alteration but a B flat puts it inſtantly out of uſe. The other gamuts have only this advantage over it, than having a column for the B ſharp alſo, that is, for a dieſis in the cleff; but as ſoon as we put more than a dieſis or a B flat (which formerly was never done) all theſe gamuts are equally uſeleſs.

At preſent, when the French muſicians ſing every thing in natural, they have no occaſion for a gamut. C ſol ut, ut, and C, are, to them, no more than the ſame thing. But in Gui's ſyſtem, ut is one thing, and C another, very different; and when he gave each note a ſyllable and a letter, he did not pretend to make ſynonymies of them, which would be doubling the names and embarraſſments to no purpoſe.

GAVOT, A kind of dance, whoſe air is two tim'd, and is cut into two repeats, each of which begins with the ſecond time, and finiſhes on the firſt. The movement of the gavot is generally pleaſing, often lively, ſometimes alſo tender and ſlow. It marks its phraſes and its ſtops every two meaſures.

GENIUS. Seek not, young artiſt, what meaning is expreſſed by genius. If you are inſpired with it, you muſt fell it in yourſelf. Are you deſtitute of it, you will never be acquainted with it. The genius of a muſician ſubmits the whole univerſe to his art. He paints every piece by ſounds; he gives a language even to ſilence itſelf; he renders ideas by ſentiments; ſentiments by accents; and the paſſions which he expreſſes are drawn from the bottom of the heart. Voluptuouſneſs, by his aſſiſtance, receives freſh charms; the grief to which he gives utterance, excites cries; he continually is burning, and never conſumes. He expreſſes with fire even the coldeſt ſubjects; even in painting the horrors of death, he conveys to the ſoul that ſentiment of life which never abandons it, and which he communicates to hearts formed to feel it. But alas! his words avail nothing to thoſe wherein his ſeeds are not implanted; and his prodigies are hardly ſenſible to thoſe who are incapable of imitating them. Would you then wiſh to know if any ſpark of this devouring flame inſpires you? Be quick, haſte to Naples, liſten to the maſter-pieces of Leo, Durante, Jommilli, Pergoleſis. If your eyes are filled with tears, if you feel your heart palpitate, if gaiety agitates you, if ſorrow involves you in tranſports, take Metaſtaſio and labour: His genius will enflame yours; you will form a creation after his example: 'Tis this which forms the genius, and the eyes of others will very ſoon reſtore you thoſe tears which your maſters have cauſed you to ſhed. But if the charms of this grand art leave you contented, if you feel no raviſhing tranſports, if you diſcover nothing beautiful, but what barely pleaſes, dare you demand what genius is? Vulgar mortal, dare not profane that heavenly appellation. What would it avail to thee to know it? Thou canſt not feel it. Compoſe in French, and peaceably retire.

GENUS. The diviſion and diſpoſition of the tetrachord conſidered in the intervals of the four ſounds which compoſe it. We imagine that this definition, which is that of Euclid, is only applicable to the Greek muſic, which I have ſpoken of in the firſt place.

The good regulations of a concord of the tetrachord, viz. the eſtabliſhment of a regular genus, depended on the three following rules, which I draw from Ariſtoxenes.

The firſt was, that the two extreme chords of the tetrachord ſhould always remain unmoveable, that their interval might always

ways be that of a true fourth, or a diateſſaron. In regard to the middle chords, I confeſs, they vary, but the interval of Lichanos in Meſis ought never to paſs two tones, nor diminiſh below a tone; ſo that they had preciſely the ſpace of a tone to vary the concord of the Lichanos, and this is the ſecond rule. The third was, that the interval from the parhypaton, or ſecond chord, ſhould not exceed that of the ſame parhypaton to the Lichanos.

As in general this concord might be diverſified three ways, thi conſtituted three principal genera, viz. the diatonic, chromatic, and enharmonic.

Theſe two laſt genera, or the two firſt intervals, formed always together a ſum leſs than the third interval, and were called, on that account, confined genera.

In the diatonic, the modulation proceeded by a ſemi-tone, a tone, and another tone, ſi, ut, re mi; and as we paſſed through three conſecutive tones, from whence it received the name of diatonic, the chromatic proceeded ſucceſſively by two ſemitones and a hemi-diton, or a minor third, ſi, ut, ut dieſis mi. This modulation was placed in the middle between the diatonic and enharmonic, making, if I may be allowed the expreſſion, different diviſions be felt, juſt as when between two principal colours were introduced ſeveral intermediate properties, and from thence this was called the enharmonic or colour'd genus. In the enharmonic, the modulation proceeded by two fourths of a tone, by dividing, according to Ariſtoxenes, the major ſemitone into two equal parts, or a diton, or major ſixth, as ſi, ſi dieſis enharmonic, ut, and mi, or, according to the Pythagoreans, in dividing the major ſemitone into two unequal intervals, which formed one the minor ſemitone, viz. our ordinary dieſis, and the other the complement of this ſame ſemitone minor to the ſemitone major; and then the diton, as before, ſi, ſi ordinary dieſis, ut, mi. In the firſt caſe, the two equal intervals of ſi to ut were both enharmonic, or the fourth of a tone; in the ſecond caſe, there was no enharmonic but the paſſage of ſi dieſis to ut, viz. the difference between the minor and major ſemitone, which is the dieſis called ſo by Pythagoras, and the true enharmonic interval given by nature.

Therefore, as this modulation, ſays Monſ. Burette, was very much confined, running only through ſmall intervals almoſt imperceptible, it was called enharmonic, as one would ſay, well joined, well collected, probé coagmentata.

Beſides theſe principal genera, there were others which reſulted all from the different parts of the tetrachord, or from methods of turning it differently from thoſe which I have mentioned. Ariſtoxenes ſubdivides the diatonic genus into ſyntonic and diatonic mollare, (vide Diatonic) and the chromatic genus into mollare, mollare hemiolian, and tonic, (vide Chromatic) whoſe differences

he gives as I have ſhewn under their articles. Ariſtides Quintilian mentions many other peculiar genera, and he reckons up ſix as very ancient, viz. the Lydian, Dorian, Phrygian, Ionian, Mixolydian, and Syntonolydian. Theſe ſix genera, which muſt not be confounded with the tones or modes of the ſame names, differ in their degrees, as well as in their concord; the one did not reach the octave, the others reach'd, and others paſs'd it, in ſuch a manner as to partake, at the ſame time, of the genus and the mode. The detail of it may be ſeen in a book, intitled, the Greek Muſician.

In general, the diatonic is divided in as many kinds as can be aſſigned to different intervals between the ſemitone and tone.

The chromatic has as many kinds as may be aſſigned to the intervals between the ſemitone and the enharmonic dieſis.

In regard to the enharmonic, it is not ſubdivided.

Independantly of all theſe ſubdiviſions, there was alſo a common genus, in which were uſed only the ſtable ſounds which belong to all the genera, and a mixt genus, which partook of the character of two or of all the three genera. Moreover, we muſt take notice, that in this collection of genera, which was very rare, there were not more than four chords made uſe of, but they were extended or relaxed differently during the ſame piece, which appears rather difficult to practice. I imagine, that perhaps one tetrachord was tun'd in one genus, and another in another, but authors have not made a clear explanation therein.

We read in Ariſtoxenes, Book I. Part II. that until the time of Alexander, the diatonic and chromatic were neglected by ancient muſicians; and that they practiſed only the enharmonic genus, as the only one worthy of their abilities: but this genus was entirely abandoned in the time of Plutarch, and the chromatic was alſo forgotten before Macrobius.

The ſtudy of the ancient writings, rather than the progreſs of our muſic, has rendered us theſe ideas, loſt amongſt their ſucceſſors. We have, as well as themſelves, the diatonic genus, chromatic and enharmonic, but without any diviſions; and we conſider theſe genera under ideas very different from thoſe which they had. They had as many peculiar manners of conducting the air on certain preſcribed chords. For us, theſe are ſo many manners of conducting the entire body of harmony, which force the parts to follow the intervals preſcribed by theſe genera; ſo that the genus belongs ſtill more to the harmony which engenders it, than to the melody which cauſes its ſenſations.

We muſt obſerve again, that in our muſic, the genera are almoſt always mixt, that is, the diatonic enters very much into the chromatic, and each of them is neceſſarily intermingled with the enharmonic. One entire piece of muſic, in one only genus, would be

be very difficult to be conducted, neither would it be ſupportable; for in the diatonic it would be impoſſible to change the tone; in the chromatic, we ſhould be forced to change the tone in each note; and in the enharmonic, there would be abſolutely no kind of union.

All this is again derived from the rules of harmony, which ſubject the ſucceſſion of concords to certain rules, incompatable with a continual ſucceſſion, enharmonic or chromatic, and alſo from that of the melody, which cannot extract any kind of pleaſing air. It was different with the genera of the ancients, as the tetrachords were equally complete, tho' differently divided in each of the three ſyſtems; if, in ordinary melody, one genus had borrowed from another, other ſounds than thoſe which were neceſſarily common between them, the tetrachord would have had more than four chords, and all the rules of their muſic would have been confounded.

Monſ. Serre, of Geneva, has made the diſtinction of a fourth genus, which I have ſpoken of in its article. (Vide Diacommatic.)

GIG, The air of a dance which bears the ſame name, whoſe meaſure is a 6=8th, and whoſe movement lively. The French operas contain many gigs, and the gigs of Correlli have been a long time celebrated; but theſe airs are entirely out of faſhion, and there are no more uſed in Italy, and very few in France.

GRACES IN SINGING, By this term are called, in the French muſic, certain turns and ſhakes in the throat, and other ornaments joined to the notes, which are in ſuch or ſuch a poſition, according to the rules preſcribed by a taſte in ſinging. (Vide Taſte in Singing.)

The principal of theſe graces are "The accent, the flow, the flatte, the martellement, full cadence, broken cadence, and extent of the voice." (Vide thoſe articles.)

GRAVE, An adverb which expreſſes ſlowneſs in a movement, and alſo, a certain gravity in the execution.

GRAVITY, Is that modification of the ſound by which it is conſidered as grave or baſs, in connection with the other ſounds, which are called high or ſharp. There is no correlative to this word in French, for that of acuity could not expreſs it.

The gravity of the ſounds depends on the bigneſs, length, and extenſion of the chords, on the length and diameter of the pipes, and, in general, on the extent and maſs of ſonorous bodies. The more they have of that, the greater is their gravity, but there is no abſolute gravity, and no ſound is flat or ſharp but by compariſon.

GROS-FA, Certain ancient pieces of church-muſic, in ſquare notes. Semibreves, and minums, were formerly called the groſ-fa.

GROUP,

GROUP, According to the Abbe Bropart, four equal and diatonic notes, the firſt and third of which are on the ſame degree, form a group. When the ſecond deſcends and the fourth riſes, it is an aſcendant group; when the ſecond aſcends and the fourth falls, it is deſcendant: and he adds, that this name has been given to theſe notes on account of the figure which they form together.

I do not remember to have ever heard this word uſed in ſpeaking, in the ſenſe which the Abbe Bropart gives it, nor to have read it in a ſimilar ſenſe any where but in his dictionary.

GUIDE, Is that part which enters firſt in a fugue, and announces the ſubject. (Vide Fugue.) This word is very common in Italy, but ſeldom uſed in France in the ſame ſenſe.

GUIDON, A ſmall ſign of muſic which is placed at the extremity of each ſtave, on the degree where the note muſt be placed which begins the following ſtave. If this firſt note is accidentally accompanied by a dieſis, or B ſharp, the guidon ſhould be accompanied alſo.

In Italy the guidon is no longer uſed, particularly in partitions, where, each part having its place fixed in the column, we cannot miſtake in paſſing from one to the other. But the guidons are neceſſary in the French partitions, becauſe, from one line to another, the columns, containing more or leſs ſtaves, leave you in a continual uncertainty of the ſtave, correſpondent to that which you have left.

GYMNOPOEDIA, An air in ſtrain, to which the young Lacedæmonians danced uncovered.

---

# H.

HARMATIAS, The name of a dactylic air, in the Greek muſic, invented by the firſt Phrygian Olympus.

HARMONY, The ſenſe which the Greeks gave to this word in their muſic, is ſo much the more difficult to determine, as being originally a proper name it has no root, by which it can be uncompoſed to extract its etymology. In the ancient treatiſes that we have remaining, harmony appears to be the part which has for its object the ſuitable ſucceſſion of ſounds, inſomuch as they are ſharp or flat, in oppoſition to the two other parts, which are called rythmica and metrica; which have connection with the time and meaſure, which leaves to this convenience a vague and undetermined idea, which cannot be fixed but by an expreſs ſtudy of all the rules of the art; and ſtill, after this, the harmony will be very difficult

difficult to be diſtinguiſhed from the melody, unleſs they add to the laſt, the ideas of rhyme and meaſure, without which, in effect, no melody can have a determined character; whereas the harmony is its own by itſelf, independant of every other quantity. (Vide Melody.) We ſee by a paſſage of Nicomachus, and others, that ſometimes the name of harmony was given to the conſonance of the octave, and to concerts of the voice, and inſtruments which were executed by the octave, and which were more commonly called antiphonies.

Harmony, according to the moderns, is a ſucceſſion of concords according to the laws of modulation. This harmony had, for a long time, no other principles than rules almoſt arbitrary, or only founded on the approbation of an exerciſed ear, which judged of the good or ill ſucceſſion of conſonances, and whoſe deciſions were immediately placed in calculation. But, P. Merſenne, and Monſ. Sauveur, having found that every ſound, tho' ſimple in appearance, was always accompanied by other ſounds leſs ſenſible, which formed with it a major perfect concord; Monſ. Rameau has left this experience, and has made from it the baſs of his harmonic ſyſtem, with which he has filled many books, and which Monſ. D'Alembert has lately taken the trouble of explaining to the public.

Monſ. Tartini, leaving another experience more new, more delicate, and not leſs certain, has attained at concluſions pretty ſimilar, by a quite oppoſite method. Monſ. Rameau engenders the treble by the baſs; Monſ. Tartini engenders the baſs by the treble: The one draws the harmony from the melody, and the former acts quite contrary. To decide from which of the two ſchools the beſt works take their origin, we need only know which ſhould be made for the other, the air or the accompaniment. A ſhort expoſition of M. Tartini's may be found at the word Syſtem. I here continue to ſpeak in that of Monſ. Rameau, which I have followed thro' the whole of this work, as the only one admitted in the country where I write.

I ought however to declare, that this ſyſtem, as ingenious as it may appear, is nothing leſs than founded on nature, as he inceſſantly repeats it; that it is eſtabliſhed only on analogies and conveniencies, which one, who is tolerable at invention, might overthrow to-morrow, by others much more natural; that laſtly, of the experience which he deduces, one is known to be falſe, and the other does not furniſh the conſequences which he would draw from it. In effect, when this author wiſhed to decorate, with the title of demonſtration, the reaſonings on which he eſtabliſhes his theory, the whole world laugh'd at him. The academy refuſed, and highly diſapproved, this ridiculous qualification; and Monſ. Eſteve, of the Societé Royale, of Montpelier, clearly ſhewed him, that to begin

begin by that propoſition, viz. that, by the law of nature, the octaves of ſounds repreſent them, and may be taken for them, was no kind of demonſtration, nor even ſolidly eſtabliſhed in his pretended demonſtration. I now return to his ſyſtem.

The phyſical principle of the reaſonance preſents to us the ſolitary concords and eſtabliſhes not the ſucceſſion. A regular ſucceſſion is however neceſſary. A dictionary of choſen words is not an harangue, nor a collection of good concords a piece of muſic. A ſenſe is wanting; an union in the muſic as well as language is neceſſary: Something of what precedes muſt be tranſmitted to what follows, that the whole may form a concinnity, and may be truly *one*.

Moreover, the compoſed ſenſation, which reſults from a perfect concord, is reſolved in the abſolute ſenſation of each of the ſounds which compoſe it; and in the compared ſenſation of each of theſe intervals which theſe ſame ſounds form between themſelves, there is nothing beyond the ſenſible in this concord; from whence it follows, that it is only by the connection of the ſounds, and the analogy of the intervals, that the union in queſtion can be eſtabliſhed: There lies the true and only principle, whence flow all the laws of harmony and modulation. If then, the whole of harmony was formed only by a ſucceſſion of perfect major concords, it would be ſufficient to proceed to them by intervals ſimilar to thoſe which compoſe ſuch a concord; for then, ſome ſound of the preceding concord being neceſſarily prolonged on the following, all the concords would be found ſufficiently united, and the harmony would be in *one*, at leaſt, in this ſenſe.

But beſides that ſuch ſucceſſions would exclude the whole melody, by excluding the diatonic genus, which forms its baſs, they would not reach the true aim of the art, ſince muſic, being a diſcourſe, ought, like it, to have its periods, its phraſes, ſuſpenſions, ſtops, and punctüation of every kind; and as the uniformity of the harmonic courſes preſents nothing of theſe properties, the diatonic courſe required the major and minor concords to be intermixt, and we have felt the neceſſity of diſſonances to mark the ſtops and phraſes. Moreover, the united ſucceſſion of perfect major concords, neither gives the perfect minor concord, the diſſonance, or any kind of phraſe, and its punctuation appears entirely erroneous.

Monſ. Rameau, inſiſting abſolutely, in his ſyſtem, that all our harmony ſhould be drawn from nature, has had recourſe, for this purpoſe, to another experience of his own invention, which I have ſpoken of before, and which is changed from the firſt. He has pretended, that any ſound furniſhed in its multiples a perfect minor concord in flat, whoſe dominant or fifth it was, as it furniſhed a major in its aliquots, of which it is the tonic or fundamental.

damental. He has advanced, as a certain thing, that a ſonorous made two other flatter chords vibrate in their totality, without, however, making them reſound, the one in its major twelfth, and the other in its ſeventeenth; and from this propoſition, joined to the precedent, he has deduced, very ingeniouſly, not only the introduction of the minor mode, and diſſonance in harmony, but the rules of the harmonic phraſe, and the whole of modulation, ſuch as we find at the words Concord, Accompaniment, Fundamental Baſs, Cadence, Diſſonance, Modulation.

But firſt, the experience is falſe. It is known, that tuned chords, below the fundamental ſound, do not entirely ſhake with this fundamental ſound, but that they are divided to render the uniſon only, which conſequently has no harmonies below. It is alſo known, that the propriety which the chords have of being divided, is not particular to thoſe which are tuned in the twelfth and ſeventeenth below the principal ſound, but that it is common to all its multiples, from whence it follows, that the intervals of twelfth and ſeventeenth, not being peculiar in their manner, nothing can be concluded from them in favour of the minor perfect concord which they repreſent.

Though we ſhould ſuppoſe the truth of this experience, this would be very far from removing the difficulties. If, as Monſ. Rameau pretends, the whole of harmony is derived from the reſonance of a ſonorous body, it does not then derive from it the ſingle vibrations of a ſonorous body which does not reſound. In effect, it is a ſtrange theory to derive from what does not reſound, the principles of harmony; and it is ſtrange in phyſic, to make a ſonorous body vibrate and not reſound, as if the ſound itſelf was at all different from the air, ſhaken by theſe vibrations. Beſides, the ſonorous body does not only give, beſides the principal ſound, thoſe ſounds which with it compoſe the perfect concord, but an infinity of other ſounds, formed by all the aliquots of the ſonorous body. Why are the firſt ſounds conſonant, and the other not, ſince they are all equally given by nature?

Every ſound forms a concord truly perfect, ſince it is formed of all its harmonies, and by them it is that it becomes a ſound. Theſe harmonies, however, are not heard, and we diſtinguiſh no more than a ſimple ſound, unleſs it be extremely ſtrong; from whence it follows, that the only good harmony is the uniſon, and that as we diſtinguiſh the conſonances, the natural proportion being changed, the harmony has loſt its purity.

This alteration is formed two ways: firſt, by giving a ſound to certain harmonies, and not to others, we change the connection of force, which ought to reign amongſt them all, to produce the ſenſation of a ſound, and the unity of nature is deſtroyed. We produce, by doubling theſe harmonies, an effect ſimilar to

that which would be produced by ſtifling all the reſt: for then we muſt not doubt, but that, with the generating ſound, we might hear thoſe of the harmonies which we ſhould have left; whereas, by leaving them all, they deſtroy each other, and concur together to produce and enforce the ſingle ſenſation of the principal ſound. This is the ſame effect which the full play of the organ produces; when removing the regiſters ſucceſſively, we leave with the principal the doublet and the fifth; for then that fifth and that third, which remained confounded, were ſeparately and diſagreeably diſtinguiſhed.

Moreover, the harmonies which were made to ſound, have themſelves other harmonies, which are not from the fundamental ſound: It is by theſe harmonies added, that that which produces them is ſtill more roughly diſtinguiſhed; and theſe ſame harmonies, which make the concord to be thus felt, enter not into their harmony. This is the reaſon why the conſonances which are moſt perfect naturally diſpleaſe the ear, little qualified to underſtand them, and I do not doubt but the octave itſelf would, as well as the reſt, diſpleaſe, if the mixture of the voices of men and women had not given the cuſtom of it from its infant ſtate.

In the diſſonance it is ſtill worſe, ſince not only the harmonies of the ſound which give it, but that ſound itſelf does not enter into the harmonious ſyſtem of the fundamental ſound; which cauſes that the diſſonance is always diſtinguiſhed in a diſagreeable manner amongſt the other ſounds.

Every touch of an organ in full play gives a perfect concord major third, which is not diſtinguiſhed from the fundamental ſound, unleſs we pay an extreme attention, and draw the tones ſucceſſively; but theſe harmonic ſounds are not confounded with the principal, but by favour of a loud harmony, and an arrangement of regiſters, by which the pipes which make the fundamental ſound reſound, cover with their force thoſe which give their harmonies. Moreover, we do not obſerve, neither can we, that continual proportion in a concert, ſince, in conjunction with the change of the harmony, this greateſt force muſt inſtantly paſs from one part to another, which is not practicable, and would entirely diſfigure the melody.

When we play on the organ, each touch of the baſs makes the perfect major concord ſound; but becauſe this baſs is not always fundamental, and as we often modulate in perfect minor concord, this major perfect concord is ſeldom that which the right hand ſtrikes; ſo that we hear the minor third with the major, the fifth with the triton, the ſuperfluous ſeventh with the octave, and a thouſand other cacophonies, with which our ear is little diſguſted, becauſe cuſtom renders them convenient; but it could not be preſumed, that it is the ſame thing with an ear naturally juſt,

juſt, and which, for the firſt time, we ſhould put to the proof of this harmony.

Monſ. Rameau pretends, that trebles of a certain ſimplicity naturally ſuggeſt their baſs, and that a man, who has an ear true, and not exerciſed, will naturally ſuggeſt it. This is a prepoſſeſſion of a muſician, proved erroneous by the whole of experience. Not only he, who ſhall never have heard baſs or harmony, will not find this harmony or baſs of himſelf, but they will diſpleaſe him as ſoon as he hears them, and he will prefer greatly the ſimple uniſon.

When we reflect, that of all the people of the earth, who all have a muſic and an air, the Europeans are the only ones who have a harmony and concords, and who find this mixture agreeable; when we reflect, that the world has continued ſo many years, without, amongſt the cultivation of the beaux arts throughout mankind in general, any one's having known this harmony; that no animal, no bird, no being in nature, produces any other concord than the uniſon, no other muſic than melody; that the eaſtern languages, ſo ſonorous, ſo muſical; that the Greek air, ſo delicate, ſo ſenſible, exerciſed with ſo much art, have never guided theſe voluptuous people, fond of our harmony, that without it, their muſic had ſuch prodigious effects, that with it, our's is ſo weak; that laſtly, it it was reſerved for the northern nations, whoſe rough and brutal organs are more touched with the eclat and noiſe of the voice, than with the ſweetneſs of the accent, and the melody of the inflections, to make this vaſt diſcovery, and to give it as a foundation of all the rules in art: When, I ſay, we pay attention to the whole of this, it is very difficult not to ſuſpect that all our harmony is but a gothic and barbarous invention, which we ſhould never have followed if we had been more ſenſible of the true beauties of art, and of muſic truly natural.

Monſ. Rameau, however, pretends that harmony is the ſource of the greateſt beauties in muſic; but this opinion has been contradicted by facts and reaſon.—By facts, becauſe all the great effects of muſic have ceaſed, and it has loſt all its energy and force ſince the invention of the counter point; to which I add, that beauties purely harmonic, are ingenious beauties, which pleaſe only perſons verſed in the art; whereas the true beauties of muſic, being thoſe of nature, are, and ought to be, equally ſenſible to every man, whether learned or ignorant.

By reaſon, becauſe harmony furniſhes no imitation by which the muſic, forming images, or expreſſing ſentiments, may be raiſed to the dramatic or imitative genus, which is the moſt noble part of art, and the only one energetic. Every thing that expreſſes only the phyſic of ſounds, being greatly bounded in the pleaſure

which it gives us, and having very little power over the human heart. (Vide Melody.)

HARMONY, A genus of muſic. The ancients often gave this name to the genus commonly called enharmonic genus. (Vide Enharmonic.)

DIRECT HARMONY, Is that wherein the Baſs is fundamental, and where the ſuperior parts preſerve a direct order between themſelves, and with the baſs. Varied harmony is that where the generating ſound or the fundamental is in ſome one of the ſuperior parts, and where ſome other ſound of the concord is tranſported to the baſs below the reſt. (Vide Direct, &c.)

FIGURED HARMONY, Is that wherein we make ſeveral notes paſs on a concord. We figure the harmony by conjoint or disjoint degrees. When we figure by conjoint degrees, we neceſſarily uſe other notes than thoſe which form the concord; notes which are not on the baſs, and are reckoned as nothing in harmony: Theſe intermediate notes ought not to aſcend to the beginning of the times, and principally the ſtrong times, unleſs it be as flowings, extent of the voice, or when we form the firſt note of the ſhort time to bear up the ſecond. But when we figure by disjoint degrees, we cannot abſolutely make uſe of any notes but thoſe which form the concord, whether conſonant or diſſonant. Harmony alſo figures by ſuſpended or ſuppoſed ſounds. (Vide Suſpenſion, Suppoſition.)

HARMONIOUS, Every thing which forms an effect in harmony, and even ſometimes every thing which is ſonorous, and fills the ear, by voices, inſtruments, and ſimple melody.

HARMONIES, Whatever belongs to harmony; as the harmonic diviſions of the monochord, the harmonic proportion, the harmonic canon, &c.

HARMONIC, By this name are called all the concomitant or acceſſary ſounds, which, by the principle of reſonance, accompany any ſound, and render it diviſible. Thus all the aliquots of a ſonorous chord give it harmonies.

HARMONIST, A muſician ingenious in harmony. "Such an one is a good harmoniſt." "Durante is the greateſt harmoniſt in Italy, that is, in the world."

HARMONOMETRE, An inſtrument proper for meaſuring harmonic connections. If we could obſerve and follow with the ear and eye, the bodies, knots, and all the diviſions of a chord ſonorous in its vibration, we ſhould have a natural harmonometre very exact; but our groſs ſenſes not being ſufficient for theſe obſervations, we ſupply them by a monochord, divided at our pleaſure by moveable bridges, and this is the beſt natural harmonometre which has been yet diſcovered. (Vide Monochord.)

HARMONIC

HARMONIC HAND, Is the name which Aretin gave to the gamut which he invented, to ſhew the connection of his hexachords, of his ſix letters and ſix ſyllables, with the five tetrachords of the Greeks. He repreſented this gamut by the figure of a left-hand, on the fingers of which were marked all the ſounds of the gamut, as well by the correſpondent letters as by the ſyllable which he had joined to them, by paſſing, by the rule of diviſions, from one tetrachord or finger to another, according to the place where the two ſemitones of the octave were placed by the B ſharp or B flat, that is, according as the tetrachords were conjoint or disjoint. (Vide Gamut, Diviſions.)

HARPALICE, A kind of ſong, appropriated to young girls amongſt the ancient Greeks. (Vide Song.)

HAUT DESSUS, This is, when the ſinging treble is divided, the ſuperior part. In inſtrumental parts we always ſay, firſt treble, and ſecond treble; but in vocal, we ſometimes ſay, haut treble, and baſs treble.

HAUTE TAILLE or TENOR, Is that part of muſic which is alſo ſimply called tenor. When the tenor is ſubdivided into two other parts, the lower takes the name of baſſe Taille, or concordant, and the higher is called haute taille.

HEAD, The head or body of a note is that part which determines its poſition, and to which the tail is fixed when it has one. (Vide Tail.)

Before the invention of printing, the notes had only black heads, for the greateſt part of the notes being ſquare, it would have been too long to make them white in writing them. In the impreſſion, the heads of the notes were made white, that is, vacant in the middle. At preſent both are in uſe, and all the reſt being equal, a white head always denotes a double power to that of a black. (Vide Notes, Powers of Notes.)

HEMI, A Greek word much uſed in muſic, and which ſignifies half. (Vide Semi.)

HEMIDITON, Was, in the Greek muſic, the interval of major third diminiſhed a ſemitone, that is, a minor third. The hemiditon is not, as might be believed, the half of a diton or tone, but it is the diton leſs than the half of a tone, which is entirely different.

HEMIOLE, A Greek word, ſignifying the entire and a half, and which has, in ſome reſpects, been conſecrated to muſic. It expreſſes the connection of two quantities, one of which is to the other as 15 to 10, or as 3 to 2. It is otherwiſe called the ſeſquialter connection.

It is from this connection that the conſonance ariſes, called diapente or fifth; and the ancient ſequialter rhyme aroſe from it alſo.

The ancient Italian authors give alſo the name of hemiole, or hemiolian, to that kind of triple meaſure, each of whoſe times is a crotchet. If this crotchet is without a tail, the meaſure is called hemiolia maggiore, becauſe it is ſtruck more ſlowly, and that two tailed crotchets are neceſſary for each time. If each time contains only one tailed crotchet, the meaſure is ſtruck a double quicker, and is called hemiolia minore.

HEMIOLIAN, This is the name which Ariſtoxenes gives to one of the three kinds of the chromatic genus, whoſe diviſions he explains. The tetrachord 30 is therein divided into three intervals, the two firſt of which, equal between themſelves, are each the ſixth part, and of which the third is two thirds $5+5+20=30$.

HEPTACHORD, A lyre or cithara with ſeven chords, as was that of Mercury, according to the report of many.

The Greeks alſo gave the name of heptachord to a ſyſtem of muſic formed of ſeven ſounds, as our gamut at preſent. The ſynemenon heptachord, otherwiſe called the lyre of Terpander, was compoſed of ſounds expreſſed by theſe letters of the gamut, E. F. G. a. b. c. d. The heptachord of Philolaüs ſubſtituted B ſharp in the place of B flat, and may be expreſſed thus, E. F. G. a. ♯. c. d. Each chord had a connection with one of the planets. The Hypate to Saturn, the Parhypate to Jupiter, and ſo on.

HEXACHORD, An inſtrument of ſix chords, or ſyſtem compoſed of ſix ſounds, as, for inſtance, the hexachord of Gui d'Arezzo.

HEXARMONIAN, A ſtrain or air, from a looſe and effeminate melody, as Ariſtophanes expreſſes it, in his reproaches to Philoxenes, its author.

HOMOPHONY, This was, in the Greek muſic, that kind of ſymphony which was formed in uniſon, in oppoſition to antiphony, which was executed in the octave. This word from ὁμὸς, like, and φωνὴ, a ſound.

HUNTING AIR, This name is given to certain airs and flouriſhes with horns and other inſtruments, which, it is ſaid, awaken the idea of the tones, which theſe ſame horns give in the chace.

HYMEE, A ſong of the miller's among the ancient Greeks, otherwiſe called epiaulia. (Vide that word.)

HYMENÆA, A marriage ſong amongſt the ancient Greeks, otherwiſe called epithalamium. (Vide Epithalamium.)

HYMN, A ſong in honour of the gods, or of heroes. There is this difference between the hymn and the cantic, that the latter moſt commonly relates to actions, and the hymn to perſons. The firſt airs of all nations were either canties or hymns. Orpheus and Linus paſſed, amongſt the Greeks, for the authors of the firſt hymns:

hymns: And amongſt Homer's poetry we have ſome remains of a collection of hymns in honour of the gods.

HYPATE, An epithet by which the Greeks diſtinguiſhed the loweſt tetrachord, and the loweſt chord of each of the two loweſt tetrachords; which, to them, was quite the contrary, as they followed, in their denominations, an order retrograde to ours, and placed on high the flat which we place low. This choice is arbitrary, ſince the ideas attached to the word ſharp or flat, have no natural union with the ideas attached to the words high and low.

They called tetrachord hypaton that which was the flatteſt of all, and immediately above the proſlambanomenos, or loweſt chord of the mode; and the firſt chord of the tetrachord which immediately followed that, was called hypate-hypaton; that is to ſay, as the Latins have tranſlated it, "the principal of the tetrachord of the principals." The tetrachord immediately following from flat to ſharp, was called tetrachord meſon, or of the middle, and the flatteſt chord was called hypate meſon, that is, the principal of the middle.

Nicomachus, the Geraſinian, pretends, that this word hypate, principal, elevated or ſupreme, was given to the flatteſt of the chords of the diapaſon, in alluſion to Saturn, which of the ſeven planets is at the greateſt diſtance from us. We have reaſon to imagine from thence that this Nicomachus was a Pythagorean.

HYPATE-HYPATON, This was the loweſt chord of the loweſt tetrachord of the Greeks, and of a higher tone than the proſlambanomenos. (Vide the preceding article.)

HYPATE-MESON, Was the loweſt chord of the ſecond tetrachord, which was alſo the ſharpeſt of the firſt, becauſe theſe two tetrachords were conjoint. (Vide Hypate.)

HYPATOIDES, Flat Sounds. (Vide Lepſis.)

HYPERBOLEAN, A ſtrain or air of the ſame character as the hexarmonian. (Vide that article.)

HYPERBOLEON, The hyperboleon tetrachord was the ſharpeſt of the five tetrachords in the ſyſtem of the Greeks.

This word is the genitive from the plural ſubſtantive ὑπερβόλαι, extremities, the ſharpeſt ſounds being at the extremity of the reſt.

HYPER-DIAZEUXIS, A disjunction of two tetrachords ſeparated by the interval of an octave, as were the tetrachord of the hypate's and hyperbole's.

HYPER-DORIAN, A mode in the Greek muſic, otherwiſe called mixo-lydian, the fundamental or tonic of which was a fourth above that of a Dorian mode. (Vide Mode.)

The invention of the hyperdorian mode is attributed to Pythoclydes.

HYPER-ÆOLIAN, The penultimate in ſharp of the fifteen modes of the Greek muſic, the fundamental or tonic of which was a fourth above that of the æolian. The hyper-æolian mode, no more than the hyper-lydian which follows it, was not ſo ancient as the reſt. Ariſtoxenes does not mention it; and Ptolemy, who admitted no more than ſeven, did not comprehend thoſe two.

HYPERIASTIAN or ſharp MIXO-LYDIAN, Is the name which Euclid, and many of the ancients, give to the mode more commonly called hyper-ionian.

HYPER-IONIAN, A mode in the Greek muſic, called alſo by ſome hyper-iaſtian, or ſharp mixo-lydian, which had its fundamental a fourth above that of the ionian mode. The ionian mode is the twelfth in order from flat to ſharp, according to Alypius's numeration. (Vide Mode.)

HYPER-LYDIAN, The ſharpeſt of the fifteen modes in the Greek muſic, the fundamental of which was a fourth above that of the lydian. This mode, no more than its neighbour the hyper-æolian, was not ſo ancient as the other thirteen; and Ariſtoxenes, who names them all, makes no mention of thoſe two.

HYPER-MIXO-LYDIAN, One of the modes in the Greek muſic, otherwiſe called the hyper-phrygian.

HYPER-PHRYGIAN, Called alſo, by Euclid, hyper-mixolydian, is the ſharpeſt of the thirteen modes of Ariſtoxenes, forming the diapaſon, or the octave, with the hypo-dorian, the flatteſt of all. (Vide Mode.)

HYPO-DIAZEUXIS, Is, according to old Bacchius, the interval of fifth, which is found between two tetrachords ſeparated by a disjunction, and moreover, by a third intermediate tetrachord. Wherefore there is a hypodiazeuxis between the tetrachords hypaton and diazeugmenon, and between the tetrachords ſynnemenon and hyperbolean. (Vide Tetrachord.)

HYPO-DORIAN, The flatteſt of all the modes in ancient muſic. Euclid ſays it is the moſt elevated; but the true ſenſe of this expreſſion is explained at the word hypate.

The hypo-dorian mode has its fundamental a fourth below that of the dorian mode. It was invented, as it is ſaid, by Philoxenes: This mode is affecting, but gay, uniting ſweetneſs to majeſty.

HYPO-ÆOLIAN, A mode in ancient muſic, called alſo, by Euclid, flat hypo-lydian. This mode has its fundamental a fourth below that of the æolian mode.

HYPO-IASTIAN. (Vide Hypo-Ionian.)

HYPO-

HYPO-IONIAN, The ſecond of the modes in ancient muſic, beginning by the flat. Euclid calls it alſo hypo-iaſtian, and flat hypo-phrygian. Its fundamental is a fourth below that of the ionian mode.

HYPO-LYDIAN, The fifth mode of ancient muſic, beginning by the flat. Euclid calls it alſo hypo-iaſtian, and flat hypo-phrygian. Its fundamental is a fourth below that of the lydian mode.

Euclid diſtinguiſhes two hypo-lydian modes, viz. the ſharp, which is that of this article, and the flat, which is the ſame as the hypo-æolian.

The hypo-lydian mode was peculiar to funeral ſongs, to ſublime and divine meditations: Some attribute its invention to Polymneſtre, of Colophon; others to Damon, the Athenean.

HYPO MIXO LYDIAN, A mode added by Gui d'Arezzo, to thoſe of the ancient muſic. It is properly the plagal of the mixo lydian mode, and its fundamental is the ſame as that of the dorian.

HYPO-PHRYGIAN, One of the modes in ancient muſic, derived from the phrygian mode, whoſe fundamental was a fourth above that of the other. Euclid ſpeaks of another hypo-phrygian mode in the flat of this: It is what is more correctly called hypo-ionian. (Vide that word.)

The character of the hypo-phrygian mode was calm, peaceable, and proper to temperate the vehemence of the phrygian. It was invented, they ſay, by Damon, the friend of Pythias, and pupil of Socrates.

HYPO-PROSLAMBANOMENOS, The name of a chord added, as it is pretended, by Gui d'Arezzo, a tone lower than the proſlambanomenos of the Greeks, that is, below the whole ſyſtem. The author of this new chord expreſſed it by the letter Γ of the Greek alphabet, and from thence we receive the name of gamut.

HYPORCHEMA, A ſort of cantic, by which the feaſts of the gods were danced.

HYPO-SYNAPHE, Is, in the Greek muſic, the disjunction of two tetrachords ſeparated by the interpoſition of a third, conjoint with thoſe two, ſo that the homologous chords of the two tetrachords, disjoined by hypo-ſynaphe, have five tones, or a minor ſeventh of interval between them. Such are the tetrachords hypaton and ſynnemenon.

# I.

IALEME, A kind of air peculiar to funerals, formerly in uſe among the Greeks, as the Linos amongſt the ſame people, and the Muneros amongſt the Egyptians. (Vide Song.)

IAMBIC. There were in the ancient muſic two kinds of iambic verſes, one of which were only recited by the ſound of inſtruments, whereas the reſt were ſung. We do not comprehend what effect the accompaniment of inſtruments on a ſimple recital could produce, and all that can be reaſonably concluded from it, is, that the moſt ſimple method of pronouncing the Greek poetry, or at leaſt the iambic, was made by appreciable ſounds, and even then received much from the intonation of the air.

IASTIAN, A name given by Ariſtoxenes and Alypius to the mode which other authors more generally call ionian. (Vide Mode.)

IMITATION. Dramatic and theatrical muſic concurs to imitation, as well as poetry or painting; 'tis to this principle that all the fine arts are connected, as Monſ. le Batteux has demonſtrated. But this imitation has not the ſame extent for all. All that the imagination can repreſent to itſelf has its origin from poetry. Painting, which does not offer its picture to the imagination, but to the ſenſe, and that one ſenſe alone, paints only objects peculiar to the ſight. Muſic would appear to have the ſame bounds in regard to the hearing: however it paints all, even the objects which are only viſible, by a tranſformation almoſt inconceivable, it ſeems to place the eye in the ear, and the greateſt ſurpriſe of an art, which agitates only in the movement, is to be able to form from it even the image of a repoſe. Night, ſleep, ſolitude, and ſilence, enter into the number of the extenſive paintings of muſic. We know that noiſe can produce the effect of ſilence, and ſilence the effect of noiſe; as when we ſlumber at an equal and monſtrous lecture, and awaken at the inſtant that it ceaſes. But muſic agitates nearer on us, in exciting, by a ſenſe, affections ſimilar to thoſe which may be excited by another, and as the connection cannot be ſenſible unleſs the impreſſion is ſtrong, ſo painting, ſtript of that force, cannot render to muſic the imitations which that draws from it. Let all nature be in a ſlumber, he that contemplates it, ſleeps not; and the art of the muſician conſiſts in ſubſtituting, in the place of the inſenſible image of the object, that of the movements which his preſence excites in the heart of the contemplator. He will not only agitate the ſea, animate the flame of a conflagration, make rivulets flow, the rain fall,

fall, and torrents ſwell, but he will paint the horrors of a boundleſs deſart, calm the tempeſt, render the air tranquil and ſerene, and ſpread over the orcheſtra, a new and pleaſing freſhneſs. He will not directly repreſent things, but excite in the ſoul the ſame movement which we feel in ſeeing them.

I have ſaid, under the word Harmony, that no principle is drawn from it which leads to muſical imitation, ſince there is no connection between the concords, and the objects we wiſh to paint, or the paſſions we would expreſs. I will ſhew, at the word Melody, what this principle is, which harmony does not furniſh, and what ſtrokes, given by nature, are uſed by muſic to repreſent theſe objects and theſe paſſions.

IMITATION, In its technical ſenſe, is the uſe of the ſame air, or one ſimilar, in many parts, which make it heard one after the other in the uniſon, the fifth, the fourth, the third, or in any interval whatſoever. The imitation is always well taken, even in changing ſeveral notes, provided that this ſame air be always known in itſelf, and that we do not remove far from the laws of a good modulation. Often, to render the imitation more ſenſible, we make precede a ſilence or long notes, which ſeem to ſtifle the air at the moment that the imitation re-animates it. We treat the imitation as we pleaſe, we leave it, we re-take it, and begin another at pleaſure: In a word, its rules are as relaxed as thoſe of the fugue are ſevere, for which reaſon great maſters diſdain it, and every imitation too affected, almoſt always cools a young ſcholar in compoſition.

IMPERFECT. This word has ſeveral ſignifications in muſic: An imperfect concord is in oppoſition to a perfect concord, that which bears a ſixth or diſſonance, and in oppoſition to the full concord, it is that which has not all the ſounds ſuitable to it, and which ought to render it complete. (Vide Concord.)

The imperfect mode or time was, in our ancient muſic, that of the double diviſion. (Vide Mode.)

An imperfect cadence is that which is otherwiſe called irregular cadence.

An imperfect cadence is that which may be major or minor, as the third and ſixth. (Vide Conſonance.)

In church-muſic, they call imperfect modes thoſe which are defectuous high or low, and reſt below one of the two terms which they ought to reach.

IMPROVISARE, Is to compoſe and ſing a ſong extempore, with airs or words, accompanied commonly by a guittar, or any other ſuch inſtrument. There is nothing more common in Italy than to ſee two marks meet, challenge, attack, and form alternate couplets on the ſame air, with a vivacity of dialogue, air, and accompaniment, which cannot be believed but by on eye witneſs.

LIBRARY



INHARMONIC. An inharmonic relation is, according to Monſ. Saverien, a term of muſic; and he ſends us, for an explanation, to the word Renvoi, where he does not mention it. In regard to ſuch a term as this, I am entirely ignorant.

INSTRUMENT, A term of genus, under which we comprehend all artificial bodies which may render and vary the ſounds, after the example of the voice. All bodies capable of agitating the air by any ſhock, and then to excite, by their vibrations, in that agitated air, ondulations pretty frequent, may afford a ſound; and all bodies capable of accelerating or retarding theſe ondulations, may vary the ſounds. (Vide Sound.) There are three methods of rendering ſounds on inſtruments, viz. by the vibrations of the chords, by thoſe of certain elaſtic bodies, and by the collection of the air ſhut up within the pipes. I have ſpoken, at the word Muſic, of the invention of theſe inſtruments.

They are generally divided into chord inſtruments, wind, and percuſſion inſtruments. The chord inſtruments, amongſt the ancients, were very numerous. The moſt known are the following: Lyra, Pſalterium, Trigonium, Sambuca, Cithara, Pectis Magas, Barbiton, Teſtudo, Epigonium, Simmicium, Epandoron, &c. All theſe inſtruments were touched with the fingers, or with the plectrum, a kind of bow.

For their principal wind inſtruments, they had thoſe call'd tibia, fiſtula, tuba, cornu, lituus, &c.

The inſtruments of percuſſion were thoſe which they named Tympanum, Cymbalum, Crepitaculum, Tintennabulum, Crotalum, &c. But many of thoſe did not vary their ſounds.

We cannot here find articles for thoſe inſtruments, or for thoſe of the modern muſic, whoſe number is exceſſive. The inſtrumental part, not being entered within the plan of my work, for the encyclopœdia, has hindered me, by the extent of the knowledge which it requires, from placing it in this.

INSTRUMENTAL, What belongs to the play of inſtruments. "An inſtrumental turn in ſinging." "Inſtrumental muſic."

INTENSE. Intenſe ſounds are thoſe which have the greateſt force, which are heard at the greateſt diſtance. They are alſo thoſe, which, being rendered by well extended chords, vibrate by their means even more ſtrongly. This word is Latin, as well as that of Remiſs oppos'd to it, but, in theoric writings, both the one and the other is frenchified and angliciſed.

INTERCIDENCE. A term in church-muſic. (Vide Diaptoſis.)

INTER-ACT, A ſpace of time which paſſes between the end of the act of an opera, and the beginning of the following act; and, during which, the repreſentation is ſuſpended, whilſt the action is ſuppoſed to continue elſewhere. The orcheſtra fills

fills this ſpace, in France, by the execution of a ſymphony, which has alſo the name of interlude.

It does not appear, that the Greeks ever divided their drama's by acts, and, conſequently, had no interludes.

The repreſentation was not ſuſpended on their theatres from the beginning of the piece to the end. It was the Romans, who, little ſmitten with the ſpectacle, began firſt to divide it into many parts, whoſe intervals offered a relaxation to the attention of the ſpectators, and this cuſtom has been continued amongſt us.

Since the interlude is formed to ſuſpend the attention and quiet the mind of the ſpectator, the theatre ſhould remain empty, and the intermedes with which it was formerly filled, formed an interruption of very bad taſte, which could not fail of injuring, by rendering the thread of the action forgotten. However, Moliere himſelf did not ſee this ſimple truth, and the inter-acts of his laſt piece were filled with intermedes. The French, whoſe ſpectacles have more reaſon than fire, and who do not love to be kept long in ſilence, have, of late, reduced the inter-acts to the ſimplicity which they ought to have; and it is to be deſired, for the perfection of the theatre, that their example ſhould be every where followed.

The Italians, whom an exquiſite ſentiment often guides more than reaſon, have proſcribed the dance of the dramatic action. (Vide Opera.) But by a conſequence which ariſes from the too great duration that they would give the ſpectacle, they fill their inter-acts with ballets, which they baniſh from the piece; and tho' they may avoid the abſurdity of a double imitation, they fall into that of the tranſpoſition of the ſcene; and leading the ſpectator thus from object to object, make him forget the principal action, loſe the intereſting parts, and, to give him the pleaſure of the eye, take from him that of the heart. They, however, begin to feel the error of this monſtrous aſſemblage, and, after having almoſt already baniſhed the intermedes of inter-acts, doubtleſs they will not heſitate to aboliſh the dances, and to preſerve it, as is becoming, to make a ſeparate and brilliant ſpectacle at the end of the piece.

But tho' the theatre remains empty in the inter-act, I do not ſay that the muſic ſhould be interrupted, for, in the opera, where it makes a part of the exiſtence of things, the ſenſe of hearing ought to have ſuch an union with that of the ſight, that whilſt we ſee the ſituation of the ſcene, we may hear the harmony, which we muſt ſuppoſe inſeparable; ſo that its concurrence may not at length appear ſtrange or new under the air of authors.

The difficulty which is preſented on this ſubject, is to know what the muſician ought to dictate to the orcheſtra, when there paſſes nothing more on the ſtage. For, if the ſymphony, as well

as

as dramatic muſic, is no more than a continual imitation, what ſhould it ſay when no one ſpeaks? What ſhould it do when there is no longer any kind of action? I anſwer to that, that though the theatre be empty, the ſoul of the audience is not ſo: there muſt have remained on them a ſtrong impreſſion of what they have juſt ſeen and heard. 'Tis for the orcheſtra to nouriſh and ſuſtain this impreſſion during the inter-act, ſo that the ſpectator may not reach the concluſion of the following act with the ſame coldneſs as he began the piece; and that intereſt may be united in his ſoul as are the events in the repreſented action. By this means, the muſician never ceaſes to have an object of imitation, either in the ſituation of the characters, or that of the ſpectators. The one never hearing but the expreſſion of thoſe ſentiments which they feel go out from the orcheſtra, are, as it were, identified with what they hear, and their condition is ſo much the more pleaſant, as there reigns in it a more perfect concord between what ſtrikes their ſenſes, and touches their heart.

The ingenious muſician draws alſo from his orcheſtra another advantage, to give the repreſentation all the effect that it can have, by leading gradually the ſpectator, attentive to the moſt favourable ſituation of the ſoul, to the effect of the ſcenes which he is about to ſee in the approaching act.

The duration of the inter-act has no fixed meaſure, but it is ſuppoſed more or leſs great in proportion to the time which that part of the action requires which paſſes behind the theatre. However, that duration ought to have the bounds of ſuppoſition, relatively to the hypothetic duration of the whole action, and thoſe of reallity, relative to the duration of the repreſentation.

This is not the place for examining if the rule of the 24 hours has a foundation ſufficient, and if it is never permitted to break through it.

But if we would give to the ſuppoſed duration of an inter-act, the bounds drawn from the nature of things, I cannot ſee that any others can be found than thoſe of the time during which no ſenſible and regular change was made in nature, as there is none made apparently in the ſcene during the inter-act. Moreover, this time is, in its greateſt extent, nearly twelve hours, which form the middle duration of a day and night. This ſpace being paſſed, there is no more poſſibility, nor illuſion in the duration of an inter-act.

In regard to the real duration, it ought to be, as I have ſaid, proportioned, both to the duration of the repreſentation, and to the partial and relative duration of what paſſes behind the ſcenes. But there are other bounds drawn from the general end, which we propoſe, viz. the meaſure of attention; for we ought to be very

very cautious not to make the inter-act continue ſo far as to let the ſpectator fall into a delirium and draw near to ſlumbering. This meaſure has not ſuch a preciſion in itſelf, but that the muſician, who has fire and genius of ſoul, may, with the aid of his orcheſtra, extend it much farther than any other. I do not even doubt but there are methods of deceiving the ſpectator by the effective duration of the inter-act, by making him eſteem it more or leſs great, by the methods of inter-fixing the characters of the ſymphony. But it is time to finiſh this article, which is already too long.

INTERLUDE, A piece of muſic or dancing, inſerted at the Opera-Houſe, and ſometimes the Play-Houſe, between the acts of a long piece, to enliven and eaſe the minds of the ſpectators, ſorrowful thro' the tragic, and intereſted in its grand concern.

There are interludes, which are real comic or burleſque drama's, the which dividing thus an intereſting part by one intereſting alſo, toſs and turn the attention of the ſpectator in contrary ſenſes, and in a method quite oppoſite to taſte and reaſon. As dancing, in Italy, does not, and ought not, to enter into the conſtitution of the lyric drama, we are obliged to admit it on the theatre, to uſe out in a detached manner from the piece. It is not that which I find fault with; on the contrary, I think it neceſſary to efface, by an agreeable ballet, the ſad impreſſions left by the repreſentation of a tragic opera; and I highly approve, that this ballet forms a ſubject which has no connection with the piece; but what I diſapprove, is, that they divide the acts by ſimilar ballets, which, dividing thus the action, and deſtroying the intereſting parts, make, as it were, a freſh piece of every act.

INTERVAL, The difference of one ſound and another between the flat and ſharp: This is the whole ſpace which one of the two would have to paſs thro' to reach the uniſon of the other. The difference between interval and extent, is, that the interval is conſidered as undivided, and the extent as divided. In the interval we conſider the two terms only: in the extent, we ſuppoſe their intermediaries: The extent forms a ſyſtem, but the interval may be uncompoſed.

To take this word in its moſt general ſenſe, it is evident that there are an infinity of intervals; but as, in muſic, we bound the number of ſounds to thoſe which compoſe a certain ſyſtem, we bound alſo, by that means, the number of intervals to thoſe which theſe ſounds may form between themſelves. So, that by combining two by two, all the ſounds of any ſyſtem ſoever, we ſhall have all poſſible intervals in the ſame ſyſtem; on which it will remain to reduce under the ſame kind, all thoſe which ſhall be found equal.

The

The ancients divided the intervals of their muſic in ſimple or uncompoſed intervals, which they called diaſtems, and in compoſed intervals, called ſyſtems.

The intervals, ſays Ariſtoxenes, are different five ways. Firſt, In extent. A great interval differs thus from a ſmaller. Secondly, In reſonance or concord. By this a conſonant interval differs from a diſſonant. Thirdly, In quantity, as a ſimple interval differs from one compoſed. Fourthly, In genus. Thus the diatonic, chromatic, and enharmonic genera, differ in themſelves. Fifthly, In the nature of their connection, as the interval, whoſe rates may be expreſſed by numbers, differs from an irrational interval. Let us ſpeak a few words on all theſe differences.

I. The ſmalleſt of all the intervals, according to Bacchius, is the enharmonic dieſis. The greateſt, to take it, at the flat extremity of the hypo-dorian mode, to the ſharp extremity of the hypo-mixo-lydian, would be of three compleat octaves; but as there is a fifth to be removed, or even a ſixth, according to a paſſage of Adraſtes, cited by Meibonius, the fourth remains above the dis diapaſon; that is, the eighteenth, as the greateſt interval of the Greek diagram.

II. The Greeks divided, as we do the intervals, into conſonant and diſſonant, but their diviſions were not the ſame as ours, (Vide Conſonance.) They again ſub-divided the conſonant intervals into two kinds, without reckoning the uniſon, which they called homophony, or a ſimilarity of ſounds, and whoſe interval is void. The firſt kind was the antiphony, or oppoſition of ſounds, which was made in the octave, and was properly no more than a replique of the ſame ſound, but however an oppoſition from flat to ſharp. The ſecond kind was a paraphony, or diſtinction of ſounds, under which was comprehended every conſonance except the octave and its repliques: All the intervals, ſays Theon, of Smyrna, which are neither diſſonant, nor in uniſon.

III. When the Greeks ſpeak of their diaſtems, or ſimple intervals, we muſt not take this term in its full rigour, for the dieſis itſelf was not, according to them, exempt from compoſition; but we muſt always connect it with the genus, to which the interval is applied. For inſtance, the ſemitone is an interval ſimple in the chromatic genus, and in the diatonic, compoſed in the enharmonic. The tone is compoſed in the chromatic, and ſimple in the diatonic; and the diton itſelf, or major third, which is an interval compoſed in the diatonic, is uncompoſed in the enharmonic. Wherefore, what is a ſyſtem in one genus, may be a diaſtem in another, and ſo reciprocally.

IV. On the genera: Divide ſucceſſively the ſame tetrachords, according to the diatonic genus, the chromatic, and enharmonic, you

you will have three different concords, which, compared together, inſtead of three intervals, will produce nine, beſides the combinations and compoſitions which can be made of them, and the difference of all theſe intervals, which will produce a multitude of others. If you compare, for inſtance, the firſt interval of each tetrachord in the enharmonic, and flat chromatic of Ariſtoxenes, you will have, on one ſide, a fourth, or $\frac{3}{12}$ of a tone, on the other, a third, or $\frac{4}{12}$, and the two ſharp chords will make together an interval; which will be the difference of the two preceeding, or the twelfth part of a tone.

V. Paſſing next to the connections, this article leads me to a ſmall digreſſion.

The Ariſtoxenians pretended that their muſic was very well ſimplified by their equal diviſions of intervals, and laughed exceedingly at the whole of Pythagoras's calculation. It ſeems, however, to me, that this pretended ſimplicity conſiſted only in the words, and that if the Pythagoreans had underſtood their maſter, and their muſic, a little better, they would very ſoon have ceaſed railing at their adverſaries.

Pythagoras did not form thoſe ſounds, and their connection, which he firſt calculated. Guided by experience, he only took an abridgement of his obſervations. Ariſtoxenes, incommoded with all his calculations, formed in his brain a ſyſtem quite different, and, as if he could have changed nature at his pleaſure, to have ſimplified the words, was, he thought, ſimplifying things, whereas in reality it was entirely contrary.

As the connections of the conſonances were ſimple and eaſy to be expreſſed, theſe two philoſophers were in agreement thereon: they were ſo even on the firſt diſſonances; for they equally agreed that the tone was the difference of the fourth and fifth. But how could they determine this difference otherwiſe than by calculation? Ariſtoxenes ſeems to deſire none, and on this tone, whoſe connection he boaſted to be ignorant of, he built his whole muſical doctrine. What could there be more eaſy than to ſhew him the falſeneſs of his operations, and the juſtneſs of thoſe of Pythagoras? But, ſhould he have ſaid, I always take doubles, or halves, or thirds. This is more ſimple, and more eaſily made than your commas, your limma and apotomes.—I confeſs it, Pythagoras had anſwered: but tell me, I beg, how you take theſe doubles, halves, and thirds? The other had replied, that he toned them naturally, or that he took them on his monochord.—Well, had anſwered Pythagoras, tone me the fourth of tone juſtly. If the other had been quack ſufficient to have done it, Pythagoras had added. But is your monochord well divided? Shew me, I beg, what method you have uſed to take

therein the third or fourth of a tone? I cannot ſee; in ſuch a caſe, what Ariſtoxenes could have anſwered. For, to ſay that the inſtrument had been tuned by the voice, beſides that it would have been falling into the circle, this was not agreed to by the Ariſtoxeneans, ſince they all avowed by their cleff, that the voice ſhould be a long time exerciſed on an inſtrument of the greateſt juſtneſs, to be able to tone the intervals of the flat chromatic, and enharmonic genus.

Moreover, ſince calculations not leſs compoſed are neceſſary, and even geometrical operations more difficult, to meaſure the thirds and fourths of the tone of Ariſtoxenes, than to aſſign the connections of Pythagoras, it is with reaſon that Nicomachus, Boetius, and many other theoricians preferred the juſt and harmonic connections of their maſter to the diviſions of the Ariſtoxenian ſyſtem, which were not more ſimple, and which gave no interval in the juſtneſs of its origin.

We muſt take notice, that thoſe reaſonings which were proper to the muſic of the Greeks, cannot be equally ſuitable to ours, becauſe all the ſounds of our ſyſtem concur in conſonances, which could not be done in theirs, but for the diatonic genus only.

It follows hence, that Ariſtoxenes diſtinguiſhed with reaſon the intervals into rational or irrational; ſince, though they were all rational in the ſyſtem of Pythagoras, the greateſt part of the diſſonances was irrational in his.

In modern muſic, we conſider the intervals alſo many ways, viz. either generally, as the ſpace or diſtance of ſome one of theſe given ſounds; or, as that only of the diſtances which may be marked; or laſtly, as thoſe which are marked on different degrees. According to the firſt ſenſe, every numerical power, as is the comma, or ſilent, as the dieſis of Ariſtoxenes, may expreſs an interval. The ſecond ſenſe is applied to the intervals only received in the ſyſtem of our muſic, the leaſt of which is the minor ſemi-tone, expreſſed on the ſame degree by a dieſis, or B flat. (Vide Semi-tone.) The third acceptation ſuppoſes ſome difference in poſition: that is, one or more degrees between the two ſounds which form the interval. 'Tis in this laſt acceptation that the word is fixed in practice; ſo that two equal intervals, ſuch as are the falſe fifth and triton, bear however different names, if the one has more degrees than the other. We divide, as the ancients did the intervals, into conſonants and diſſonants. The conſonants are perfect or imperfect. (Vide Conſonance.) The diſſonances are ſo by nature, are become ſo accidentally. There are only two intervals diſſonant by their nature, viz. the ſecond and ſeventh, by underſtanding their octaves and repliques.

Theſe

Theſe two alſo may be reduced into one only, but all conſonances may become diſſonant by accident. (Vide Diſſonance.)

Moreover, every interval is ſimple or redoubled. The ſimple interval is that which is contained within the bounds of the octave. Every interval which exceeds this extent is redoubled; that is compoſed of one or more octaves, and of the ſimple interval whoſe replique it is.

The intervals which are ſimple are again divided into direct and varied. Take as a direct any ſimple interval ſoever, its complement in the octave is always varied from that, and reciprocally.

There are only ſix kinds of ſimple intervals, three of which make complements of three others in the octave, and conſequently their variations only. If you then take the ſmalleſt intervals, you will have for direct, the ſecond, third, and fourth; for varied, the ſeventh, ſixth, and fifth. Let the one be direct, the others will be varied, and ſo reciprocally.

To find the name of any interval ſoever, we muſt only add the unity to the number of the degrees which it contains. Wherefore the interval of one degree will give the ſecond; of two, the third; of three, the fourth; of ſeven, the octave; of nine, the tenth, &c. &c. But this is not ſufficient to determine an interval; for under the ſame name it may be major or minor, juſt or falſe, diminiſhed or ſuperfluous.

The imperfect conſonances, and the two natural diſſonances, may be major or minor, which, without changing the degree, makes, in the interval, the difference of a ſemi-tone. If from a minor interval, we take again a ſemi-tone, this interval becomes diminiſhed. If we augment a major interval a ſemitone, it becomes ſuperfluous.

The perfect conſonances are invariable by their nature. When their interval is what it ought to be, they are called juſt. If we change this interval a ſemi-tone, the conſonance is called falſe, and becomes a diſſonance; ſuperfluous, if the ſemi-tone is added; diminiſhed, if it is cut off. The name of falſe fifth is given improperly to the diminiſhed fifth: it is taking the kind for the genus. The ſuperfluous fifth is quite as falſe as the diminiſhed, and even in many reſpects more ſo.

# TABLE

## OF ALL THE

# SIMPLE INTERVALS

## Practicable in Muſic.

| Intervals expreſſed by Notes. | Name of the Interval. | Degrees which it contains | Power in Tones and Semi-tones. | Reference in Numbers. |
|---|---|---|---|---|
| Ut ♯ — re ♭ | Second diminiſhed | — 1 — | — 0 — | 375— —384 |
| Si —— ut | Second minor | — 1 — | 1 Semi-Tone | 15—— 16 |
| Ut —— re | Second major | — 1 — | 1 Tone | 8—— 9 |
| Ut —— re ♯ | Second ſuperfluous | — 1 — | 1 ½ Tone | 64—— 75 |
| Si —— re ♭ | Tierce diminiſhed | — 2 — | 1 Tone | 125—— 144 |
| Mi —— ſol | Tierce minor | — 2 — | 1 ½ Tone | 5—— 6 |
| Ut —— mi | Tierce major | — 2 — | 2 Tones | 4—— 5 |
| Fa —— la ♯ | Tierce ſuperfluous | — 2 — | 2 ½ Tones | 96—— 125 |
| Ut ♯ — fa | Fourth diminiſhed | — 3 — | 2 Tones | 75— — 96 |
| Ut —— fa | Fourth juſt | — 3 — | 2 ½ Tones | 3—— 4 |
| Ut —— fa ♯ | Fourth ſuperfluous called Triton | — 3 — | 3 Tones | 32—— 45 |
| Fa ♯ — ut | Fifth diminiſhed called falſe Fifth. | — 4 — | 3 Tones | 45 —— 64 |
| Ut —— ſol | Fifth juſt | — 4 — | 3 ½ Tones | 2—— 3 |
| Ut —— ſol ♯ | Fifth ſuperfluous | — 4 — | 4 Tones | 16—— 25 |
| La ♯ — fa | Sixth diminiſhed | — 5 — | 3 ½ Tones | 125—— 192 |
| Mi —— ut | Sixth minor | — 5 — | 4 Tones | 5—— 8 |
| Sol —— mi | Sixth major | — 5 — | 4 ½ Tones | 3—— 5 |
| Re ♭ — ſi | Sixth ſuperfluous | — 5 — | 5 Tones | 72—— 125 |
| Re ♯ — ut | Seventh diminiſhed | — 6 — | 4 ½ Tones | 75—— 128 |
| Mi —— re | Seventh minor | — 6 — | 5 Tones | 5—— 9 |
| Ut —— ſi | Seventh major | — 6 — | 5 ½ Tones | 8—— 15 |
| Sol ♭ — fa ♯ | Seventh ſuperfluous | — 6 — | 6 Tones | 81—— 160 |
| Ut —— ut | Octave | — 7 — | 6 Tones | 1—— 2 |

We

We here find a table of all the ſimple intervals practicable in muſic, with their names, their degrees, their powers, and references.

We muſt take notice in this table, that the interval, called by the harmoniſts, ſuperfluous ſeventh, is only a major ſeventh, with a peculiar accompaniment; the true ſuperfluous ſeventh, as it is marked in the table, not having a place in harmony, or only ſucceſſively, as an enharmonic tranſition, never rigorouſly in the ſame concord.

We ſhould obſerve alſo, that the greateſt part of theſe references may be determined ſeveral ways: I have preferred the moſt ſimple, and that which gives the feweſt numbers.

To compoſe or redouble one of theſe intervals that are ſimple, it is ſufficient to add to it the octave as many times as we chuſe, and to have the name of this new interval, we muſt add to the ſimple name of interval as many times ſeven as it contains octaves. Reciprocally, to know the ſimple of a redoubled interval, whoſe name it has, we muſt only reject ſeven as often as we can. The reſt will give the name of the ſimple interval which produced it. Chuſe you a redoubled fifth? that is, the octave of the fifth, or the fifth of the octave? To five add ſeven, you will have twelve. The redoubled fifth is then a twelfth. To find the ſimple of a twelfth, reject ſeven from the number twelve as many times as you can, the remaining five ſhews you its fifth. In regard to the connection, we muſt only double the conſequence, or take the half of the antecedent of the ſimple powers as many times as we add octaves, and we ſhall have the powers of the redoubled ratio. Wherefore, two three, being the ratio of the fifth; one three, or, two ſix, will be that of the twelfth, &c. Wherein we muſt obſerve, that in muſical terms, to compoſe or rodouble an interval, is not to add it to itſelf, but to add to it an octave: to triple it, is to add two of them, &c.

I ought to mention here, that all the intervals expreſſed in this dictionary by the names of notes, ought always to be reckoned from flat to ſharp, ſo that this interval, ut ſi, is not a ſecond, but a ſeventh; and ſi ut, is not a ſeventh, but a ſecond.

INTONATION, The action of tuning. (Vide To Tune.) The intonation may be juſt or falſe, too high or too low, too ſtrong or too weak, and then the word intonation, accompanied with an epithet, is underſtood of the method of tuning.

IONIAN or IONIC, The ionian mode was, counting from flat to ſharp, the ſecond of the five middle modes of the Greek muſic. This was alſo called iaſtian, and Euclid calls it the Phrygian flat. (Vide mode.)

IRREGULAR. Irregular modes in church-muſic, are thoſe whoſe extent is too great, or who have ſome other irregularity.

Formerly,

Formerly, that cadence which did not fall on one of the eſſential chords of the tone was called irregular; but Monſ. Rameau has given this name to a particular cadence, in which the fundamental baſs aſcends from fifth, or deſcends from fourth, after a concord of ſixth added. (Vide Cadence.)

---

# J.

TO JAR, Is to loſe the intonation; that is, to change improperly the juſtneſs of the intervals, and, conſequently, to ſing falſe. There are ſome muſicians, whoſe ear is ſo juſt, that they form no jar, but ſuch as are rather uncommon. Many others do not jar for another reaſon, ſince, to loſe the tone it muſt firſt have been found. To ſing without a key, to bawl, force the voice too high or too low, and to have more regard to the extent than to the juſtneſs, are methods almoſt ſure to ſpoil the ear, and at the ſame time to jar.

JARGON, Is, in general, every emotion of the air which renders itſelf ſenſible to the audible organs. But in muſic, the word jargon is oppoſed to ſound, and is underſtood of every ſenſation of the hearing, which is not ſonorous and appreciable. We may ſuppoſe, to explain the difference in regard to this, between the jargon and ſound, that the laſt is appreciable only by the concourſe of its harmonies, and the jargon is not ſo, becauſe it is deprived of it. But beſides that this method of appreciation is difficult to conceive, if the emotion of the ſound, cauſed by the ſound, makes the aliquots of that chord vibrate with another, we cannot ſee why the emotion of the air, cauſed by the jargon, ſhaking that ſame chord, ſhould not, at the ſame time, ſhake its aliquots. I do not know that any propriety of the air has been made which can make it ſuſpected, that the agitation which produces the ſound, and that which produces the prolonged jargon, ſhould not be of the ſame nature; and that the action and re-action of the air and the ſonorous body, or of the air and the jarring body, ſhould be cauſed by different laws in the effect of each.

Might it not be conjectured, that the jargon is not of a different nature from the ſound, that itſelf is only the ſum of a confuſed multitude of different ſounds, which are heard at a time, and render, in ſome ſort, their ondulations mutually contrary. All elaſtic bodies ſeem to be more ſonorous in proportion as their matter

matter is more homogenous, as the degree of coheſion is more equal throughout, and as the body is not, as it were, divided into a multitude of ſmall maſſes, which, having different ſolidities, reſound conſequently in different tones. Why ſhould not the jargon be from the ſound, ſince it excites it? For every jargon makes the chords of a harpſichord reſound, not ſome ones as does a ſound, but all together, becauſe there is not one which finds its uniſon, or its harmonies. Why ſhould not the jargon be from the ſound, ſince by ſounds the jargon is made? Touch, at the ſame time, all the keys of an inſtrument, and you will produce a total ſenſation, which will be a jargon only, and whoſe effect will be prolonged by the reſonance of the chords, only as every other noiſe which would make the ſame chords reſound. Why ſhould not the jargon be from the ſound, ſince a too ſtrong ſound is veritably a jargon, as a voice which ſcreams to its utmoſt height, or particularly as the ſound of a large bell, which we hear even in the clapper itſelf. For it is impoſſible to appreciate it, unleſs, when iſſuing from the clapper, the ſound be ſweetened by a convenient diſtance.

But it may be ſaid, how happens this change of an exceſſive ſound into a jargon? It is becauſe the violence of the vibrations renders the reſonance of ſo great a number of aliquots ſenſible; becauſe the mixture of ſo many different ſounds forms then its ordinary effect, and is no longer any thing more than noiſe. Wherefore the aliquots which reſound are not only the half, third, fourth, and all the conſonances, but the ſeventh part, the ninth, the one hundredth, and ſtill farther. All this forms an effect ſimilar to that of all the keys of a harpſichord ſtruck at the ſame time, and by this means the ſound becomes a jargon.

The name of jargon is given, in contempt, alſo to a confuſed and noiſy piece of muſic, wherein more *Fracas* is heard than harmony, and more clamour than air. "This is only jargon." "This opera makes a great jargon, and little effect."

JULE, The name of a kind of hymn or ſong amongſt the Greeks, in honour of Ceres and Proſerpine. (Vide Song.)

JUST. This epithet is generally given to the intervals whoſe ſounds are exactly in the connection which they ought to have, and to voices which ſtrike theſe intervals always in juſtneſs; but it is eſpecially applied to perfect conſonances. The imperfect may be major or minor; the perfect are only juſt: as ſoon as they are altered a ſemi-tone, they become falſe, and conſequently diſſonances. (Vide Interval.)

JUST, Is ſometimes an adverb alſo. "To ſing juſt." "To play juſt."

K.

# K.

KEYS, A general ſtave or ſum of the ſounds of all the ſyſtem, which reſults from the relative poſitions of the three cleffs. This poſition gives an extent of twelve lines, and, conſequently, of twenty-four degrees, or three octaves and a fourth. All that exceeds this ſpace, above or below, cannot be marked but by the aſſiſtance of one or more accidental lines, added to the fifth which compoſe the ſtave of a cleff.

The notes or diatonic touches of the keys, which are always conſtant, are expreſſed by the letters of the alphabet, with the difference of the notes of the gamut, which, being moveable and relative to the modulation, bear names which expreſs theſe connections. (Vide Gamut.)

Each octave of the keys comprehend thirteen ſounds, ſeven diatonic and five chromatic, repreſented on the inſtrumental cleff by ſo many touches. Formerly theſe thirteen touches anſwered to fifteen chords, viz. one more between the re dieſis and the natural mi, the other between the ſol dieſis and the la; and theſe two chords which formed enharmonic intervals, and which were made to ſound at will by means of two broken touches, were looked upon then as the perfection of the ſyſtem; by virtue of our rules of modulation, theſe two have been cut off, becauſe it would have been neceſſary for them to be placed every where. (Vide Cleff.)

KNOTS, Thoſe fixed points were called knots in the which a ſonorous chord, put into vibration, was divided into vibrating aliquots, which render another ſound than that of the entire chord. For inſtance, if of two chords, one of which will be the triple of the other, we make the ſmalleſt ſound, the greater will anſwer, not by the ſound which it has as an entire chord, but by the uniſon of the ſmalleſt; becauſe, in that caſe, the greater chord, inſtead of vibrating in its totality, is divided, and vibrates only by each of its thirds.

The immoveable points, which are the diviſions, and which, in ſome reſpect, take the place of bridges, are what Monſ. Sauveur has called knots; and he has called ventres the middle points of each aliquot, where the vibration is greateſt, and where the chord is fartheſt removed from the line of the ſtop.

If, inſtead of making another ſmaller chord ſound, we divide the greater to the point of one of its aliquots, by a trifling obſtacle which retards it without ſubjecting it, the ſame caſe will again be met with by making one of the two parts reſound, for

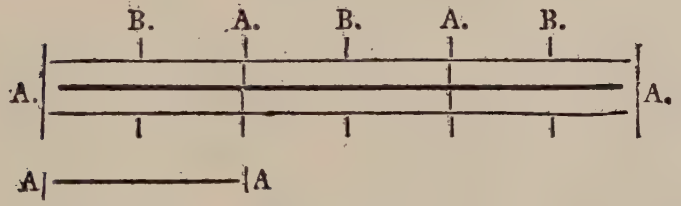
for then the two will reſound in the uniſon of the ſmall, and we ſhall ſee the ſame knots, and the ſame venties as before.

If the ſmaller part is not the immediate aliquot of the greater, but that they have only one common aliquot, they will then be divided both according to their common aliquot, and we ſhall ſee knots and venties, even in the ſmaller parts.

If the two parts are incommenſurable, that is, that they have no common aliquot, then there will be no reſonance, or there will be only that of the ſmaller part, unleſs we ſtrike ſtrong enough to force the obſtacle and make the entire chord reſound.

Monſ. Sauveur found a method to ſhew theſe knots, &c. to the academy, in a very ſenſible manner, by placing on the chord papers of two colours, one in the diviſions of the knots, and the other in the middle of the ventres; for then at the ſound of the aliquot we always ſaw the papers of the ventres fall, and thoſe of the knots remain in their place.

Sonorous Chord in Vibration by its Aliquots at the Sound of one between them.




A. Knots, where were the papers of one Colour.
B. Ventue, where were the papers of another Colour.

# L.

LA, The name of the ſixth note of our gamut, invented by Guy Aretin.

LARGE, The name of a kind of note in our old muſic, whoſe powers were augmented by drawing ſeveral ſtrokes, not only on the ſides, but thro' the middle of the note, which Muris forcibly blames, as an unnatural innovation.

LARGO. This word written at the head of an air, ſpecifies a ſlower movement than the adagio, and the laſt of all in ſlow-

neſs. It ſhews that we muſt extend the long ſounds, time and meaſure, &c.

The diminutive larghetto denotes a movement rather quicker than largo, more ſlow than andante, and approaching nearly to andantino.

LEAP. Every paſſage from one ſound to another by disjoint degrees is a leap. There is a regular leap, which is always made on a conſonant interval, and an irregular on a diſſonant. This diſtinction happens from all the diſſonances, except the ſecond, which is not a leap, being more difficult to tune than the conſonances. A neceſſary obſervation in melody to compoſe eaſy and agreeable airs.

LEMME, A ſilence or pauſe of a ſhort time, in the catalectic rhyme. (Vide Rhyme.)

LENE, A ſound ſuſtained by a part during two or more meaſures, whilſt the other parts are changing. (Vide Meaſure.) It happens ſometimes, but ſeldom, that all the parts are lene's at the ſame time, and in that caſe the lene muſt not be ſo long, that the ſentiment of the meaſure be forgotten.

LEPSIS, The Greek name of one of the three parts of the ancient melopœa, called alſo ſometimes Euthia, by which the compoſer diſcerns, if he ought to place his air in the ſyſtem of baſs ſounds called hypatoïdes, in that of ſharp ſounds called netoïdes, or that of middling ſounds called meſoïdes. (Vide Melopœa.)

LICENCE, A liberty which the compoſer takes, and which ſeems contrary to rules, tho' it be in their principle; for herein the licences are diſtinguiſhed from faults. For inſtance, it is a rule in compoſition not to aſcend from the minor third, or minor ſixth, to the octave. This rule is derived from the law of harmonic union, and from that of the preparation. When then we aſcend from the minor third, or minor ſixth, to the octave, ſo that there be however an union between the two concords, or that the diſſonance is prepared, we uſe a Licence: but if there be neither union nor preparation, we make a fault. It is a rule alſo, not to make two juſt fifths together between the ſame parts, particularly by a ſimilar movement: the principle of this rule is in the law of the unity of the mode. Every time then that theſe two fifths may be made without making two modes be felt, it is a licence, but there is no fault. This explanation was neceſſary, becauſe the muſicians have no clear idea of this word licence.

As the greateſt part of the rules of harmony are founded on arbitrary principles, and change by cuſtom and the taſte of the compoſers, it happens thence that theſe rules vary, are ſubject to the mode, and that what is a licence at one time, is not ſo at another. Two or three ages back, it was not permitted to make

two

two thirds together, particularly of the ſame kind; however, entire pieces are now made by thirds. Our ancients did not permit three conſecutive tones to be tuned diatonically: at preſent, we tune, without heſitation, as many as the modulations will permit. It is the ſame thing with falſe relations, ſyncopated harmony, and a thouſand other accidents of compoſition, which were firſt faults, then licences, and, at preſent, have not any irregularity at all.

LICHANOS, Is the name, which, among the Greeks, the third chord of their two firſt tetrachords bore, becauſe that third chord was touched by the index, which they called Lichanos.

The third chord, in the ſharp of the loweſt tetrachord, which was that of the hypate's, was formerly called lichanos hypaton, ſometimes hypaton diatonos, enharmonios, or chromatiké, according to the Greeks. That of the ſecond tetrachord, or tetrachord of the middle, was called lichanos meſon, or meſon diatonos, &c.

LIGATURE, Was, in our ancient muſic, the union by a ſtroke of two or more paſſed notes, or diatonically, or by disjoint degrees on the ſame ſyllable. The figure of theſe notes, which was ſquare, gave a great facility in uniting them ſo, which cannot be done at preſent but by means of the chapeau, on account of the roundneſs of our notes.

The power of notes which compoſed the ligature, varied much, according as they aſcended or deſcended; according as they were differently united with a tail, or without; according as theſe tails were placed on the right or left, aſcending or deſcending; laſtly, according to a number of rules ſo entirely forgotten at preſent, that perhaps there is not a muſician in Europe who is able to decypher the muſic of ſome diſtant antiquity.

LIMMA, An interval of the Greek muſic, which is leſs by a comma than a major ſemi-tone, and, being cut off from a major tone, leaves the apotome for a remainder.

The connection of the limma is from 243 to 256, and its generation is found, beginning by ut, at the fifth fifth ſi, for then the quantity by which this ſi is ſurpaſſed by the adjoining ut, is preciſely in the connection which I have laid down.

LINE. The lines in muſic are thoſe horizontal and parallel ſtrokes which compoſe the ſtave, and on which, or in the ſpaces which ſeparate them, we place the notes according to their degrees. The ſtave in church-muſic has only four lines, that of muſic in general has five firm and complete, beſides the additional lines often added above or below the ſtave for the notes which paſs its extent.

The lines, whether in church-muſic, or in any other kind, are reckoned, beginning at the moſt baſs. This moſt baſs is the firſt, the

the higheſt is the fourth, in church-muſic, the fifth in others. (Vide Stave.)

LINOS, A kind of ruſtic air amongſt the ancient Greeks; they had alſo a funeral air of the ſame name, which anſwers to what the Latins called nænia. The one ſay that the linos was invented in Ægypt; others attribute its invention to the Eubeian linus.

LIVELY, In Italian vivace: This word denotes a gay, quick, animated movement, a bold execution, full of fire.

LONGUE, Is, in our ancient muſic, a ſquare note with a tail on the right, thus . It is ordinarily equal to four two-timed meaſures, that is, two breves; ſometimes it is equal to three according to the mode. (Vide Mode.)

Muris, and his contemporaries, had longues of three kinds, viz. the perfect, the imperfect, and the double. The perfect longue has, on the right ſide, a tail deſcending or . It is equal to three perfect times, and is itſelf called perfect, on account, ſays Muris, of its numerical reference to the Trinity. The imperfect longue is figured as the perfect, and is not diſtinguiſhed but by the mode: It is called imperfect, becauſe its courſe is not alone, and as it ought always to be preceded or followed by a breve. The double longue contains two equal times imperfect; it is figured as the ſimple longue but with twice the bigneſs . Muris cites Ariſtotle to prove that this note is not belonging to church-muſic.

At preſent, the word longue is the correlative of breve, (vide Breve) wherefore every note which precedes a breve, is a longue.

TO LOOSEN, Is, on ſleeve inſtruments, ſuch as the violin, the violincello, &c. to remove the left hand from its natural poſition, to advance it on a poſition higher, or more in ſharp. (Vide Poſition.) The compoſer ought to know the extent which the inſtrument has, without looſening, ſo that when it paſſes this extent, and looſens, that may be done in a practicable manner.

LOURE, A kind of dance, whoſe air is rather ſlow, and is ordinarily marked by the meaſure $\frac{6}{4}$. When each time bears three notes, the firſt is pointed, and that of the middle is render'd a breve. Loure is the name of an ancient inſtrument, on which the air of the dance in queſtion was played.

LOW, In muſic, ſignifies the ſame thing as grave, and this term is oppoſed to high and ſharp. We ſay alſo, that the tone is too low, that one ſings too low, that the ſound muſt be enforced

forced lower. Low ſignifies ſometimes alſo ſlowly, and in this ſenſe it is oppoſed to ſtrong. We ſay, to ſpeak low, to ſing in low or baſs voice. "He ſung or ſpoke ſo low, that it was with difficulty he was heard."

Low again is uſed in the ſub-diviſion of the ſinging trebles, in ſpeaking of that of the two which is below the other; or to ſpeak in other words, low treble is a treble, whoſe diapaſon is below the ordinary medium. (Vide Treble.)

LUTHIARY, A workman who makes violins, violincellos, and other ſimilar inſtruments. This word, which ſignifies a maker of lutes, has been tranſmitted by Synecdoche to this kind of workmen, becauſe, formerly, the lute was the inſtrument moſt uſed in former times, and which were moſt made.

LYDIAN, The name of one of the modes of the Greek muſic, which was placed in the middle between the æolian and hyperdorian. It was called alſo ſometimes the barbarous mode, becauſe it bore the name of an Aſiatic people.

Euclid diſtinguiſhes two lydian modes. The above, properly called ſo, and another which he calls flat lydian, and which is the ſame with the æolian mode, at leaſt in regard to its fundamental. (Vide Mode.)

The character of the lydian mode was animated, ſtriking, ſorrowful however, pathetic, and proper for ſoftneſs, for which reaſon, Plato baniſhed it from his Republic. It is on this mode that Orpheus, it is ſaid, attracted the very beaſts, and with which Amphion built the walls of Thebes. It was invented, the one ſay, by Amphion, the ſon of Jupiter and Antiope; others, by Olympus, a Myſian, a deſciple of Marſias; others alſo, by Melampides; and Pindar ſays, that it was uſed, for the firſt time, at the marriage of Niobe.

LYRIC, What belongs to the lyre: This epithet was formerly given to the poetry made to be ſung and accompanied by the lyre, or cithara, by the ſinger, as odes and other ſongs, with the difference of the dramatic and theatrical poetry, which was accompanied with flutes by others, but at preſent it is applied contrariwiſe to the ſilly poetry of our opera's, and by extenſion, to the dramatic and imitative muſic of the theatre. (Vide Imitation.

LYTIERSE, A ſong of the reapers amongſt the ancient Greeks.

# M.

MA, A ſyllable with which ſome muſicians ſol fa the mi B flat, as they ſol fa by ſi the fa dieſis.

MACHICOTAGE. By this term is called, in church-muſic, certain additions and compoſitions of notes, which fill, by another diatonic courſe, the intervals of tierces and others. The name of this kind of air comes from that of the Eccleſiaſtics, called machicots, which formerly executed it after the children of the band.

MADRIGAL, A piece of muſic well ſtudied and ingenious, which was very much in faſhion in Italy in the ſixteenth age, and even at the beginning of the precedent. The madrigals were generally compoſed for the voice in five or ſix parts, all forced, on account of the fugues and deſigns with which theſe pieces were filled; but the organiſts compoſed and executed alſo the madrigals on the organ; and it is even pretended, that it was on this inſtrument that the madrigal was invented. This kind of counter-point, which was ſubjected to very rigorous laws, bore the name of magridaleſque ſtile. Many authors, for having excelled in it, have immortalized their names in the annals of art. Such were amongſt others, Luca Marentio, Luigi Preneſtino, Pomponio Nenna, Tommaſo Pecci, and particularly the famous Prince of Venoſa, whoſe madrigals, full of knowledge and taſte, were admired by all the maſters, and ſung by all the ladies.

MAGADIZARE, Was, in the Greek muſic, to ſing in the octave, as the voices of men and women did naturally when united together; wherefore the magadized airs were always antiphonies. This word comes from magas, the bridge of an inſtrument, and by extenſion, an inſtrument with double chords, each aſcending to the octave by means of a bridge, as, at preſent, our harpſichords.

MAGASIN, The Hôtel de la Dependance of the opera at Paris, where the directors and other perſons employed in the opera houſe lodged, and in which is a little theatre, called alſo theatre, or theatre du magaſin, on which the firſt repetitions were made. This is the odeum of the French muſic. (Vide Odeum.)

MAJOR. The intervals ſuſceptible of variation are called major, when they are ſo large as to be ſo without becoming falſe.

The intervals called perfect, ſuch as the octave, the fifth, and fourth, have no variation, and are only juſt, as ſoon as they are altered, they become falſe. The other intervals may, without changing their names, and without ceaſing to be juſt, vary a certain

certain difference: when this difference may be removed, they are major; minors, when it may be added.

These variable intervals are five in number, viz. the semi-tone, the tone, the third, the sixth, and seventh. In regard to the tone and semi-tone, their difference from major to minor cannot be expressed in notes, but in numbers only. The major semi-tone is the interval of a minor second, as from si to ut, or from mi to fa, and its connection is from fifteen to sixteen. The major tone is the difference of the fourth and fifth, and its connection is from eight to nine.

The three other intervals, viz. the third, the sixth, and the seventh, always differ a semi-tone from major to minor, and these differences may be noted. Wherefore the minor third has one tone and a half, and the major third two tones.

There are some other smaller intervals, as the diesis and the comma, which may be distinguished in less, minor, middle, major, and maxima; but as these intervals cannot be expressed but in numbers, these distinctions are useless in practice.

Major is also said of a mode when the tierce of the tonic is major, and then the word mode often is only understood "To pass from major to minor." (Vide Mode.)

MARCH, A military air, which is played by instruments of war, and denotes the metre and cadence of the drums, which is properly the march.

Chardin says, that in Persia, when they are desirous of building houses, flattening a piece of ground, or making some other expeditious work, which requires a quantity of hands, they assemble together the inhabitants of one quarter, that they may labour with the sound of the instruments; and that, by this means, the work may be transacted with much greater zeal and quickness, than if the instruments were not used.

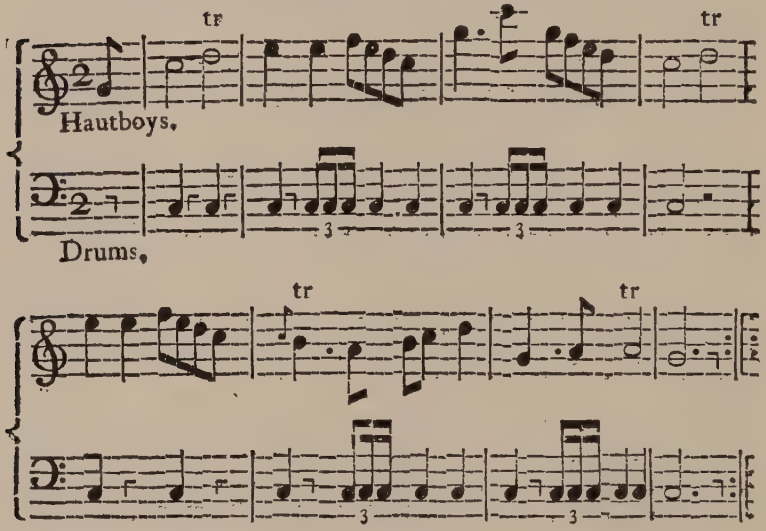
The Marechal de Saxe has shewn, in his reveries, that the effect of the drums was not bounded by a vain noise without utility, but that, according as the movement was more lively or slower, they naturally transported the soldier to press or slacken his pace; we may also say, that the airs of the marches should have different characters, according to the occasion wherein they were used; and this is what they ought to have reflected on to a certain point, when they were distinguished and diversified, one for the assembling together, another for the march, another for the charge, &c. &c. But it would have answered very well if they had profited by this principle as much as they might have done. They have, till now, confined themselves to the composing of tunes which might make the metre be felt, and the beating of the drum be clearly heard. The airs of marches also very often are deficient in that particular.

The

The French troops having few military inſtruments for the infantry, except the fifes and drums, have alſo very few marches, and the greateſt part very badly compoſed; but there are ſome admirable in the German armies.

As an example of the concord and tune of the march, I have given the firſt part of that of the French muſqueteers.

March of the Muſqueteers of the King of France.




There are only the infantry and light cavalry which have marches amongſt the troops. The tymbals of the cavalry have no fixed march; the trumpets have only one tone almoſt uniform, and ſome flouriſhes.

MARTELLEMENT. A kind of grace in the French ſinging. When diatonically deſcending from one note on another by a trill, we enforce the ſound of the firſt note on the ſecond, falling immediately on that ſecond note, by a ſingle turn of the voice, that is called forming a martellement.

MAXIMUM. We call the interval mixiumum, that which is greater than the major of the ſame kind, and which cannot be marked; for if it could be marked, it would not be called maximum, but ſuperfluous.

The ſemi-tone maximum forms the difference of the minor ſemi-tone and the major tone, and its connection is from twenty-five to twenty-ſeven. There would be between the ut dieſis, and the re, a ſemi-tone of that kind, if all the ſemi-tones were not rendered equal, or ſuppoſed ſuch by the government.

The

The dieſis maximum is the difference between the minor tone and ſemi-tone maximum, in reference from 243 to 250.

Laſtly, The comma maximum, or comma of Pythagoras, is the quantity by which is made the difference between the two terms neareſt to each other, by the progreſſion of fifth, and by a progreſſion by octaves; that is, the exceſs of the twelfth fifth ſi dieſis, on the ſeventh octave ut, and this exceſs, in the reference of 524288 and 531441, is the difference which the government cauſes to be null.

MAXIM, Is a note made in a long horizontal ſquare, with a tail on the right ſide in this manner , which is equal to eight two-timed meaſures, viz. two longues, and ſometimes three, according to the mode. (Vide Mode.) This kind of note is no longer uſed, ſince the meaſures are ſeparated by bars, and the length or continuities of ſounds are marked with ties. (Vide Meaſure.)

MEASURE, The diviſion of the duration or time into ſeveral equal parts, long enough for the ear to catch and ſubdivide their quantity, and ſhort enough for the idea of the one not to be effaced before the return of the other, and for its equality to be felt.

Each of theſe equal parts is alſo called meaſure; they are ſubdivided into other aliquots, called times, and which are marked by equal motions of the hand or foot. (Vide To beat Time.) The equal duration of each time or meaſure is filled by ſeveral notes, which paſs quicker or ſlower in proportion to their number, and to which different figures are given to make their different durations. (Vide Power of the Notes.)

Many, conſidering the progreſs of our muſic, imagine the meaſure to be a new invention, becauſe it was once neglected. But on the contrary, the ancients not only practiſed the meaſure, but even gave it rules very ſevere, and founded on principles which ours know nothing of. In effect, to ſing without meaſure, is not to ſing; and the ſentiment of the meaſure, not being leſs natural than that of the intonation, the invention of theſe two things could not be made ſeparately.

The meaſure of the Greeks was confined to their language. It was poetry which gave it to muſic: the meaſures of the one anſwered to the feet of the other. Proſe could not have been meaſured in muſic. Amongſt us, it is quite contrary; the little proſody of our languages cauſes the power of the notes in our airs to determine the quantity of the ſyllables: it is on the melody that we are obliged to ſcan our diſcourſe. We do not even perceive whether what we ſing is proſe or verſe: our poetry having no feet, our vocal muſic has no meaſure. The air guides,

and the language obeys. The measure fell into oblivion, tho' the intonation was always cultivated, when, after the victories of the Barbarians the language changed their character, and lost their harmony. It is not surprising, that the metre, which served to express the measure of the poetry, should be neglected in those times, when it was no longer felt, and when verse was sung less than prose.——The people, at that time, knew hardly any other amusement than the ceremonies of the church, no other music than that of their devotions; and, as this music did not require a regularity of rhyme, that part was at length entirely forgotten. Gui marked his music with points, which did not express different quantities; and the invention of notes was certainly since the time of that author.

This invention of different powers of notes is generally attributed to Jean de Muris, about the year 1330. But P. Mersenne denies it with reason; and one must have never read the writings of that canon, to sustain an opinion which they so clearly refute. He not only compares the powers which the notes had before him to those which were given them in his time, and which he does not pretend to be the author of, but he even speaks of the measure, and says that the moderns, that is, his contemporaries, nunc morosâ multum utuntur mensurâ, which evidently supposes that the measure, and, consequently, the power of the notes, were known and used before him. Those who would wish to enter a more extensive search where that part of music was in the time of that author, should consult his manuscript treatise, intitled, Speculum Musicæ, which is in the king of France's library, numero 7207, page 280.

The first who gave the notes any rules of quantity, were more attentive to the powers, or relative durations of these notes, than to the measure itself, or to the character of the movement; so that before the distinction of the different measures, there were notes of, at least, five different powers, viz. The maximum, the longue, the breve, the semi-breve, and minime, which may be seen at their articles. What there is of certainty, is, that all these different powers are found, and even more, in the manuscripts of Machault, without finding therein any sign of measure.

In the end, the connection in power of one of these notes to the other, depended on the time, the prolation, and mode. By the mode was determined the connection of the maximum with the longue, or of the longue with the breve; that of the longue with the breve, or of the breve with the semi-breve; and by prolation, that of the breve with the semi-breve, or of the semi-breve with the minor. (Vide Mode, Prolation, Time.) In general, all these different modifications may be connected with the

the double or triple meaſure, that is, with the diviſion of each power into two or three equal times.

This method of expreſſing the time or meaſure of the notes changed entirely during the courſe of the laſt age. As ſoon as it was the cuſtom to encloſe each meaſure within two bars, it was abſolutely neceſſary to proſcribe all the kinds of notes which encloſed more meaſures. Its meaſure became clearer, the partitions better ordered, and the execution eaſier, which was very neceſſary to compenſate for the difficulties which muſic acquired in becoming every day more compoſed. I have ſeen excellent muſicians very much embarraſſed to execute in meaſure the trios of Orlando and Claudin, compoſers in the time of Henry III. of France.

Till that time the triple had paſſed as the moſt perfect; but at length the double took the aſcendant, and the ſix or four-timed meaſure was taken as the baſe of all the reſt. Moreover, the four-timed meaſure is always reſolved into one of two times, wherefore, it is properly to the double meaſure that all the reſt are connected, at leaſt in regard to the powers of the notes, and ſigns of the meaſures.

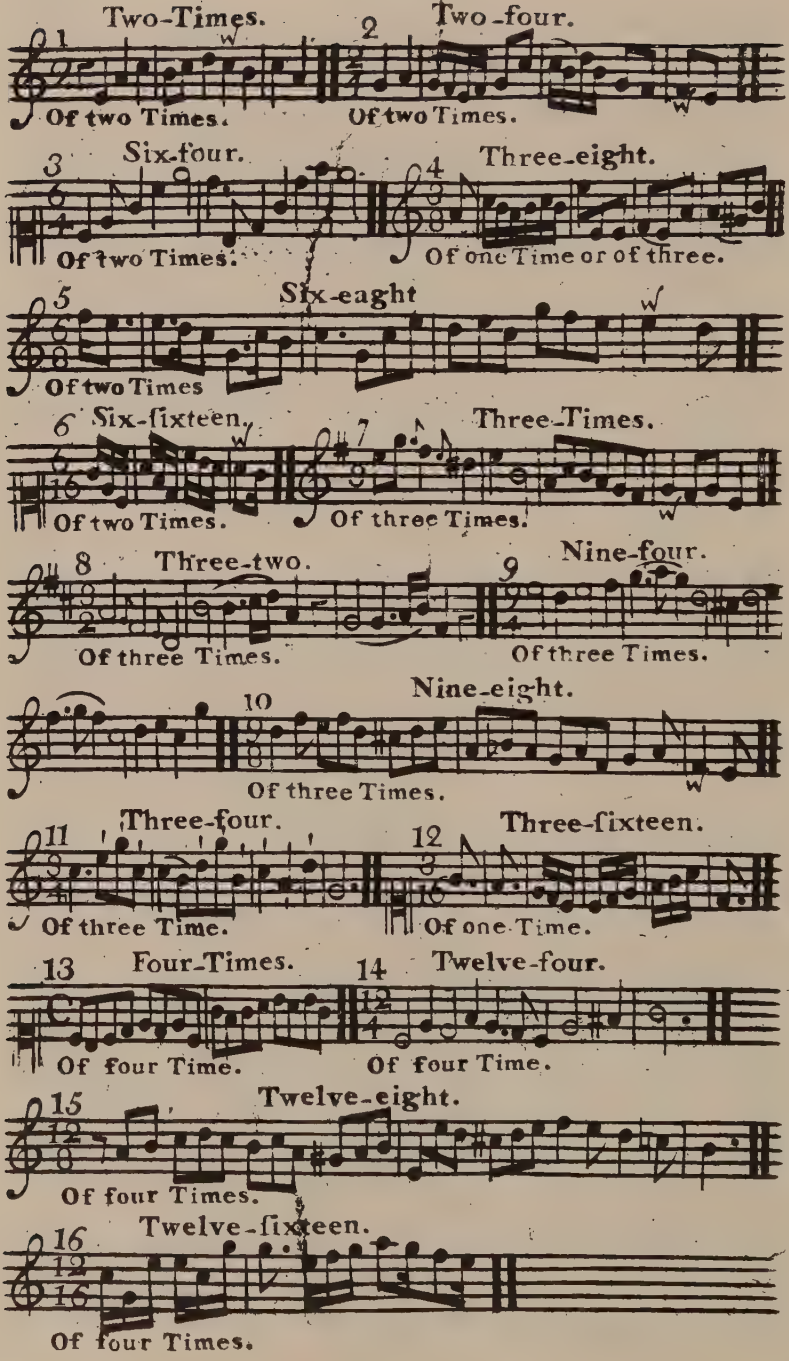
Inſtead then of maximums, longues, breves, ſemi-breves, &c. were ſubſtituted minums, crotchets, demi-crotchets, double and triple demi-crotchets, &c. which were all taken in a ſub-double diviſion, ſo that every kind of note was preciſely equal to the half of the precedent. A diviſion clearly inſufficient, ſince the triple meaſure being preſerved, as well as the double or quadruple, and every time being diviſible, as every meaſure into a ſub-double or ſub-triple power, at the will of the compoſer, it was neceſſary to aſſign, or, rather, preſerve to the notes, diviſions that anſwered to theſe two calculations.

The muſicians ſoon found out the error; but, inſtead of eſtabliſhing a new diviſion, they endeavoured to ſupply that by ſome new invented ſign; wherefore, not being able to divide a minum into three equal parts, they were contented with writing three crotchets, adding the cypher three on that of the middle. This cypher itſelf, at laſt, appeared too troubleſome for them, and to lay a ſurer net for thoſe who read their muſic, they have taken the reſolution to ſuppreſs the three, or even the ſix; ſo that to know if the diviſion is double, or triple, we have no other ſtep to take than to count the notes, or gueſs.

Tho' there are in our muſic only two kinds of meaſures, there are ſo many diviſions made, that at leaſt ſixteen kinds may be reckoned, whoſe ſigns are theſe,

2 or ¢ 2 6 6 6 3 3 3 9 3 9 3 C. 12 12 12
4 · 4 · 8 · 16. 2 · 4 · 4 · 8 · 8 · 16 · 4 · 8 · 16.

(Vide the Examples.)


1 Two-Times.
Of two Times.
2 Two-four.
Of two Times.
3 Six-four.
Of two Times.
4 Three-eight.
Of one Time or of three.
5 Six-eaght
Of two Times
6 Six-ſixteen.
Of two Times.
7 Three-Times.
Of three Times.
8 Three-two.
Of three Times.
9 Nine-four.
Of three Times.
10 Nine-eight.
Of three Times.
11 Three-four.
Of three Time.
12 Three-ſixteen.
Of one Time.
13 Four-Times.
Of four Time.
14 Twelve-four.
Of four Time.
15 Twelve-eight.
Of four Times.
16 Twelve-ſixteen.
Of four Times.

Of all these measures there are three which are called simple, because they have only a single cypher or sign, viz. the 2 or ¢, the 3, and the C, or four Times. All the rest, which are called double, take their denomination and signs from this last, or from the round note which fills it. This is the rule.

The inferior cypher denotes a number of notes of equal powers, forming together, the duration of a semi-breve, or a four-timed measure. The superior cypher shews how many of those same notes are necessary to fill each measure of the air we are to write.

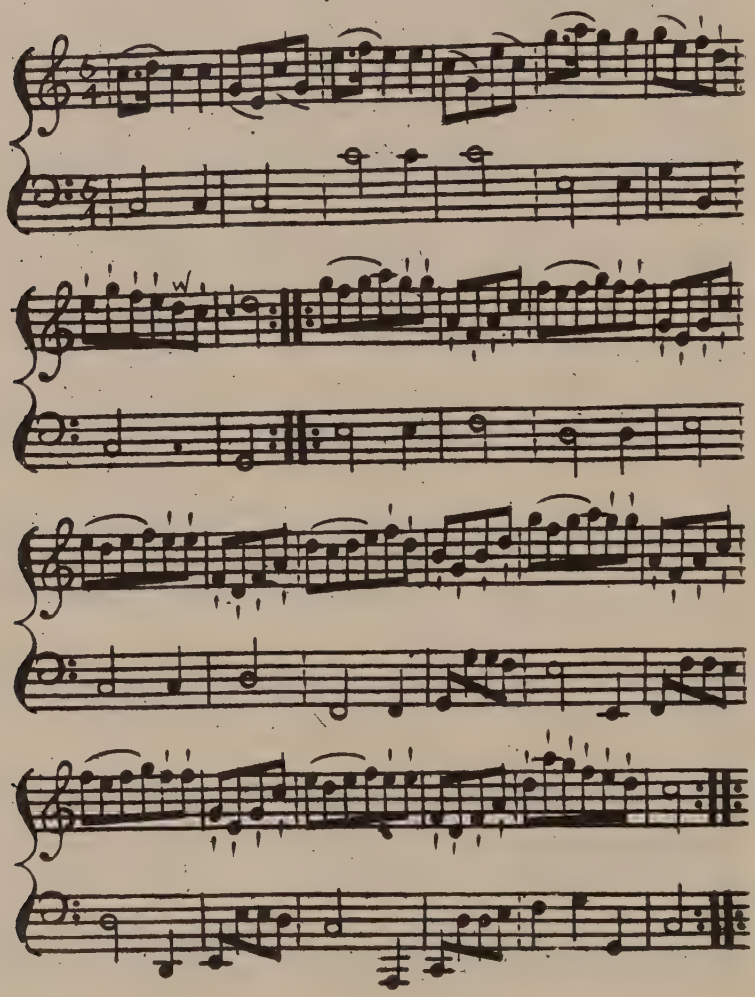
By this rule, we see that three minums are necessary to fill a measure with the sign $\frac{2}{3}$, two crotchets for that with the sign $\frac{2}{4}$, three demi-crotchets for that with the sign $\frac{3}{8}$, &c. All this confusion of cyphers is ill understood; for why is this connection of so many different measures to that of four times, which is so little like them? or why this connection of so many different notes to a crotchet, whose duration is so little determined? If all these signs are intitled to mark so many different kinds of measures, there are a great deal too many: and if they are to express the different degrees of movements, there are not enough; since, independant of the nature of the measure and division of the times, we are almost always constrained to add a word at the beginning of an air to determine its time.

There are really no more than two kinds of measures in our music, viz. of two and of three equal times; but as each time, as well as each measure, may be divided into two or three equal parts, this makes a sub-division, which gives four kinds of measure in all: We have no more.

We might, however, add a fifth, by combining the two first in a measure of two unequal times; the one composed of two notes, and the other of three. We may find, in this measure, airs very well cadenced, which it would be impossible to mark by an usual measure. I here give an example.

Example

Example of a Meaſure Seſqui-alter, of two unequal Times.



The Sieur Adolphats made, at Genes, in 1750, an Eſſay of this Meaſure, in the grand orcheſtra, in the air ſe la ſorte mi condanna, of his opera d'Ariane. This piece ſucceeded, and was applauded. In ſpite of that, I do not find that his example has been followed.

MEDIANT, Is the chord or note which divides into two thirds the intervals of fifth, which is found between the tonic and dominant. The one of theſe thirds is major, the other minor;

minor; and it is their relative poſition which determines the mode. When the major third is in flat, that is, between the mediant and tonic, the mode is major; when the major third is in ſharp, and the minor in flat, the mode is minor. (Vide Mode, Tonic, Dominant.)

MEDIATION, A parting of each verſe in a pſalm into two diviſions: the one ſung by one ſide of the band, and the other by the other, in catholic churches.

MEDIUM, That ſituation of the voice which is equally diſtant from from flat and ſharp. The higher is more ſtriking, but it is always forced; the baſs is grave and majeſtic, but it is more rough. A pleaſing medium, in which we ſuppoſe a certain latitude, gives the beſt formed ſounds the moſt melodious, and ſtrikes the ear much more agreeably. (Vide Sound.)

MEDLEY, One of the parts of the ancient melopœa, called agoge by the Greeks, which conſiſted in interplacing, and properly mixing, the modes and genera. (Vide Melopœa.)

MELODY, A ſucceſſion of ſounds, ſo ordered, according to the laws of rhyme and modulation, that it forms a ſenſation agreeable to the ear. The vocal melody is called air, the inſtrumental, ſymphony.

The idea of rhyme enters neceſſarily into that of melody, an air is an air no longer than it is meaſured; the ſame ſucceſſion of ſounds may receive as many characters, as many different melodies, as it can be differently ſcann'd; and the ſmalleſt change of the power of the notes can diſfigure this ſame ſucceſſion, ſo far as to render it dubious. Wherefore the melody is nothing by itſelf: it is the meaſure which determines it, and there is no air without its time. We ought not then to compare melody with harmony, an abſtraction made from the meaſure in each; for it is eſſential to the one, and not to the other.

Melody has reference to two different principles, according to the manner in which we conſider it. Taken in the connection of ſounds, and by the rules of the mode, it has its principle in harmony; ſince it is an harmonic analyſis which gives the degrees of the gamut, the chords of the mode, and the laws of the modulation, the only elements of ſinging. According to this principle, the whole force of melody is bounded to the flattering the ear by agreeable ſounds, as one flatters the eye by agreeable concords of colours; but when taken as an art of imitation, by which the mind may be affected with different images, the heart moved by different ſentiments, the paſſions excited or calmed, in a word, moral effect be operated, which ſurpaſs the immediate empire of the ſenſe, another principle muſt be ſought for it, for we ſee no one taken, by which the harmony alone, and whatever comes from it, can affect us thus.

What

What is this ſecond principle? It is in nature as well as the firſt, but to diſcover it therein, a more nice obſervation is neceſſary, tho' more ſimple, and a greater ſenſibility in the obſerver. This principle is the ſame which makes the tone of the voice vary when we ſpeak, according to the things we ſay, and the movements we uſe in ſpeaking. It is the accent of the language which determines the melody in each nation; it is the accent which makes us ſpeak while ſinging, and ſpeak with more or leſs energy, according as the language has more or leſs accent. That, whoſe accent is moſt expreſſed, ſhould produce a melody more lively and more paſſionate. That which has little or no accent, can have only a cold and languiſhing melody, without character or expreſſion. Herein are the true principles: As long as we leave them, and attempt to ſpeak of the power of muſic on the human heart, we ſhall ſpeak unintelligibly,—we ſhall know nothing of what we ſay.

If muſic paints only by melody, and receives from thence its whole force, it follows, that every muſic, which does not ſing, however harmonious it may be, is not an imitative muſic; and not being able either to touch or paint with its beautiful concords, ſoon fatigues the ear, and always leaves the heart in a ſtate of coldneſs. It follows alſo, that in ſpite of the diverſity of parts, which harmony has introduced, and which at preſent are ſo much abuſed, that as ſoon as two melodies are heard at the ſame time, they efface each other, and are of no effect, however beautiful each of them may be ſeparately; from whence we may judge with what taſte the French compoſers have introduced in their operas, the uſe of making an air of accompaniment ſerve in the place of a chorus; or another air, which is as if they had taken into their heads to make two diſcourſes at the ſame time, to give a greater force to their eloquence. (Vide Unity of Melody.)

MELODIOUS, Whatever produces a melody. Melodious, in general, is ſaid of agreeable ſounds, ſonorous voices, ſweet and pleaſing airs, &c.

MELOPOEA. This was, in ancient muſic, the regular uſe of all the harmonic parts: that is, the art or rules of the compoſition of an air, the practice and effect of which was called melody.

The ancients had different rules for the method of conducting their airs by conjoint degrees, disjoint, or mixed, in aſcending or falling. We find many in Ariſtoxenes, which all depend on this principle, that in every harmonic ſyſtem, the third or fourth ſound after the fundamental, ought always to ſtrike its fourth or fifth, according as the tetrachords are conjoint; or disjoint, a difference

difference which renders a mode authentic or plagal, at the pleaſure of the compoſer. This collection of all the rules is called melopœa.

The melopœa is compoſed of three parts, viz. the priſe, lepſis, which teaches the muſician in what extent of the voice he ought to eſtabliſh his diapaſon; the medley, mixis, according to which he unites or mixes properly the genera, or the modes; and the uſe, chreſes, which is ſub-divided into three other parts. The firſt, called euthia, directs the courſe of the air, the which is, either direct from flat to ſharp, or changed from ſharp to flat; or mixt, that is, compoſed of each. The ſecond, called agogé, moves alternatively by diſjoint degrees in aſcending, and conjoint in deſcending, or the contrary. The third, called petteïa, by which he diſcerns and picks out the ſounds to be rejected, thoſe to be admitted, and thoſe to be uſed moſt frequently.

Ariſtides Quintilian divides the whole melopœa into three kinds, which are connected with as many modes, taking this laſt name in a new ſenſe. The firſt kind was the hypatoïdes, called ſo from the chord hypate, the principal or moſt baſs, becauſe the air, directing only the flat ſounds, was not at a diſtance from that chord, and this air was proper to the tragic mode. The ſecond kind was the meſoïdes, from meſe, the chord of the middle, becauſe the air reigned on the middling ſounds, and this anſwered to the nomic mode, conſecrated to Apollo. The third was called netoïdes, from nete, the laſt or higheſt chord: its air was extended only on the ſharp ſounds, and conſtituted the dithyrambic or bacchic mode. Theſe modes had others, which were ſubordinate to them, and varied the melopœa; ſuch as the erotic or amorous, the comic, and encomiac deſtined to praiſes.

All theſe modes, being proper to excite or calm certain paſſions, had great influence on the manners, and by a reference to this influence, the melopœa was again divided into three genera, viz. the ſyſtaltic, or that which inſpired tender and affecting paſſions, the ſorrowful, and thoſe capable of engaging the heart, according to the ſenſe of the Greek word. Secondly, the diaſtaltic, or that which was proper to expreſs noble ſentiments, in exciting joy, courage, magnanimity. Thirdly, the euchaſtic, which was between the other two, and which reſtored the ſoul to a ſtate of tranquility. The firſt kind of melopœa was convenient for amorous poetry, ſorrows, bewailings, and other ſimilar expreſſions. The ſecond was ſuitable for tragedies, warlike airs, and heroic ſubjects. The third to hymns, praiſes, or inſtructions.

MELOS, Sweetneſs of ſinging. It is difficult to diſtinguiſh, in the Greek authors, the ſenſe of the word melos from that of melody. Plato, in his Protagoras, places the melos in ſimple diſcourſe, and ſeems to underſtand by it the tune of the word.

The melos appears to be that by which the melody was rendered agreeable. This word is derived from μέλι, Honey.

MESIS, The name of the ſharpeſt chord of the ſecond tetrachord among the Greeks. (Vide Meſon.)

Meſe ſignifies middle, and this name was given to that chord, not, as the Abbé Bropard ſays, becauſe it is common between the two octaves of the ancient ſyſtem, for it bore that name before this ſyſtem had acquired that extent; but becauſe it formed preciſely the middle between the two firſt tetrachords, of which this ſyſtem was then compoſed.

MESOIDES, A kind of melopœa, whoſe airs always were directed on the middle chords, which were alſo called the meſoides of the meſis, or tetrachord meſon.

MESOIDES, Middle ſounds, or ſounds taken in the medium of the ſyſtem. (Vide Melopœa.)

MESON, A name given by the Greeks to their ſecond tetrachord, beginning to reckon by flat; and this is alſo the name by which each of theſe four chords is diſtinguiſhed from thoſe which correſpond to them in the other tetrachords. So, in that I am ſpeaking of, the firſt chord was called hypate-meſon; the ſecond, parhypate-meſon; the third, lichanos-meſon, or meſon-diatonos; and the fourth, meſis. (Vide Syſtem.)

Meſon is the genitive plural of meſis, middle, becauſe the tetrachord meſon is placed in the middle between the firſt and third; or rather, becauſe the chord meſis gives its name to the tetrachord, whoſe ſharp extremity is formed.

A general Diagram of the Greek Syſtem for the diatonic Genus.

| | Modern Names. | Ancient Names. | |
|---|---|---|---|
| | La | Neté hyperboleon | Tetrachord hyperboleon. |
| | Sol | Hyperboleon diatonos | |
| | Fa | Trite hyperboleon | |
| | Mi | Neté diezeugmenon — | Synaphe ou conjunction. |
| Tetrachord Synnemenon. | Re | Diezeugmenon diatonos | Tetrachord diazeugmenon. |
| | | Neté ſynnemenon | |
| | Ut | Synnemenon diatonos | |
| | | Trite ſynnemenon | |
| | Si | Parameſis — — | Diazeuxis ou disjunction. |
| | Si bemol | Trite ſynnemenon | |
| | La | Meſis — — — | |
| | Sol | Meſon diatonos — — | Tetrachord meſon. |
| | Fa | Parhypate meſon — — | |
| | Mi | Hypate meſon — — | Synaphe ou conjunction. |
| | Re | Hypaton diatonos — — | Tetrachord hypaton. |
| | Ut | Parhypate hypaton — | |
| | Si | Hypate hypaton — — | |
| | La | Proſlambanomenos | |

MESOPYCNI,

MESOPYCNI, By this name the ancients called, in the confined genera, the ſecond ſound of each tetrachord. The ſounds meſopycni were five in number. (Vide Sound, Syſtem, Tetrachord.)

METRIC, The metric meaſure, according to Ariſtides Quintilian, is the part of muſic, in general, which has, as its object, the letters, ſyllables, feet, verſes, and the poem. And there is this difference between the metric and rhymic, that the firſt is only uſed in the form of the verſes, and the ſecond in that of the feet which compoſe them, which can be applied even to the proſe. From whence it follows, that the modern languages may even have a metric muſic, ſince they have a poeſy, but not a rhymic muſic, becauſe their poeſy has no direction by feet. (Vide Rhyme.)

MI, The third of the ſix ſyllables invented by Gui Aretin, to name the notes when the words are not joined to the muſic. (Vide E fi mi, Gamut.)

MINIME, We call interval minime, or leſſer, that which is leſs than the minor of the ſame kind, and which cannot be marked, for if it could be, it would not be ſtiled minime, but diminiſhed.

The minime ſemi-tone is the difference between the ſemi-tone maximum, and the middle, in reference from 125 to 128. (Vide Semi-tone.)

MINIME, In connection with the duration or time, is, in ancient muſic, the note which at preſent we call minum. (Vide Power of the Notes.)

MINIME REST, A ſilence equivalent to a crotchet, and which is marked by a bent ſtroke approaching to the figure of 7, a cypher, but turned in a contrary ſenſe, in this ſort, 𝄽. (Vide Silence, Notes.)

MINOR, A name borne by certain intervals, when they are ſmall enough to be ſo without becoming falſe. (Vide Major, Interval.)

Minor is alſo ſaid of the mode, when the third of the tonic is minor. (Vide Mode.)

MINUM, Is the name of a note, which is equal to two crotchets, or the half of a ſemi-breve. (Vide Notes.)

MIXIS, MEDLEY, One of the parts of the ancient melopœa, by which the compoſer learns to combine properly the intervals, and to diſtribute the genera and modes according to the character of the air which he has propoſed to form. (Vide Melopœa.)

MIXO-LYDIAN, The name of one of the modes of ancient muſic, called otherwiſe hyper-dorian. (Vide this word.) The mixo-lydian mode was the ſharpeſt of the ſeven, to which Ptolomy had reduced all thoſe of the Greek muſic.

This mode is affecting, paſſionate, ſuitable to the greater movements, and, by that means, to tragedy itſelf. Ariſtoxenes aſſures us, that Sappho was the inventreſs of it; but Plutarch ſays, that ſome ancient tables attribute it to Pytoclides. He alſo ſays, that the Argians puniſhed the firſt that uſed it, and who had introduced in muſic the uſe of ſeven chords, that is, a tonic on the ſeventh chord.

MIXT, We call mixt, or connexed modes, in church muſic, the airs whoſe extent exceeds their octave, and enters from one mode into another, partaking, by this means, from the authentic and the plagal. This medley is compoſed of equal modes, as of the firſt tone with the ſecond; of the third with the fourth; in a word, of the plagal with its authentic, and reciprocally.

MOBILE, The two middle chords of each tetrachord were called mobile chords in the Greek muſic, becauſe they accorded differently according to the genera, with the difference of the two extreme chords, which, never varying, were called ſtable chords. (Vide Tetrachord, Genus, Sound.)

MODE, The regular diſpoſition of an air and its accompaniment, in relation to certain principal ſounds, on the which a piece of muſic is conſtituted, and which are called the eſſential chords of the mode.

The mode differs from the tone, in that the former denotes only the chord, or place of the ſyſtem which ought to ſerve as a baſe to the air, and the mode determines the third, and modefies the whole ſcale on this fundamental ſound.

Our modes are not founded on any characteriſtic ſentiment, like thoſe of the ancients, but only on our harmonic ſyſtem. The chords eſſential to the mode are three in number, and form together a perfect concord. Firſt, the tonic, which is the fundamental chord of the tone and mode. (Vide Tone and Tonic.) Secondly, the dominant in the fifth of the tonic. (Vide Dominant.) Thirdly, the mediant, which conſtitutes the mode properly, and which is in the third of the ſame tonic.

As this third may be of two kinds, there are two different modes. When the mediant forms a major third with the tonic, the mode is major; it is minor when the third is minor.

The major mode is immediately engendered by the reſonance of the ſonorous body, which renders the major third of the fundamental ſound; but the minor mode is not given by nature: it is found only by analogy and variations. This is true in the ſyſtem of Monſ. Tartini, as well as in that of Monſ. Rameau.

This laſt author, in his different ſucceſſive works, has explained that origin of the minor mode in different methods, no one of which has contented his interpreter M. D'Alembert. For which reaſon, D'Alembert founds that ſame origin on another principle, which

which I cannot display better than by transcribing the very terms of that great geometrician. " In the air ut mi ſol, which " conſtitutes the major mode, the ſounds mi and ſol are ſuch, " that the principal ſound ut makes them both ſound, but the " ſecond ſound mi does not make ſol ſound, which is only its " minor third.

" Moreover, let us ſuppoſe, that in the place of this ſound mi, " we place between ut and ſol another ſound, which has, as well " as the ſound ut, the property of making ſol reſound, and which, " however, is different from ut; this ſound, which we ſeek for, " ought to be ſuch, as to have for major ſeventeenth the ſound " ſol, or one of the octaves of ſol; conſequently, the ſought " ſound ſhould be in the major ſeventeenth below ſol, or, which " is the ſame thing, in the major third below the ſame ſound " ſol. Moreover, the ſound mi being in minor third below ſol, " and the major third being a ſemi-tone greater than the minor, " it follows, that the ſound we ſeek will be a ſemi-tone lower " than the mi, and will conſequently be mi B flat. This new " arrangement, ut, mi B flat, ſol, in which the ſounds ut and " mi B flat, each make ſol reſound, without ut making mi B flat " reſound, is not, in reality, as perfect as the firſt arrangement " ut, mi, ſol; becauſe, in the one, the two ſounds mi and ſol " are each engendered by the principal ſound ut, whereas, in the " other, the ſound mi B flat is not engendered by the ſound ut; " but this arrangement ut mi B flat ſol, is ſo dictated by na- " ture, tho' leſs immediately than the firſt, and, in effect, ex- " perience proves that the ear is but little accommodated to " it.

" In the courſe ut, mi B flat, ſol, ut, it is evident, that the " third of ut to mi B flat is minor, and ſuch is the origin of the " genus or mode called minor."

Elements of Muſic, Page 22.

The mode being once determined, all the ſounds of the gamut take a relative or fundamental name, and proper to the place which they hold in that mode. Here are all the names of the notes in relation to their mode, taking the octave of ut as an example of the major mode, and that of la of the minor.

Major

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Major | Ut | re | mi | fa | ſol | la | ſi | ut |
| Minor | La | ſi | ut | re | mi | fa | ſol | la |
| | Tonic. | Second Note. | Mediant. | Fourth Note, or Sub-dominant. | Dominant. | Sixth Note, or Sub-dominant. | Seventh Note. | Octave. |

We muſt take notice, that when the ſeventh note is only in a ſemi-tone of the octave, that is, when it forms the major third of the dominant, as the ſi natural in major, or the ſol dieſis in minor, then that ſeventh note is called a ſenſible note, becauſe it expreſſes the tonic, and makes the tone felt.

Not only each degree takes the name ſuitable to it, but each interval is determined in relation to the mode. Theſe are the rules eſtabliſhed for the purpoſe: Firſt, The ſecond note ought to form a major ſecond on the tonic, the fourth, and dominant, a juſt fourth and fifth, and this equally in the two modes.

Secondly, In the major mode, the mediant or third, the ſixth and ſeventh of the tonic ought always to be major: this is the character of the mode. For this ſame reaſon, theſe three intervals ought to be minor in the minor mode; however, as we muſt perceive therein the ſenſible note, which cannot be done without a falſe relation, whilſt the ſixth note remains minor; this cauſes exceptions, to which we muſt pay attention in the courſe of harmony and ſinging; but the cleff with its tranſpoſitions muſt always give all the determined intervals by connection with the tonic, according to the nature of the mode: We may find at the word cleff a general rule for it.

As all the natural chords of the octave of ut give, in relation to that tonic, all the intervals preſcribed for the major mode, and as it is the ſame thing with the octave of la for the minor mode, the precedent example, which I have propoſed only for the names of the notes, ought to ſerve alſo as formula for the rule of intervals in each mode.

This rule is not, as might be believed, eſtabliſhed on principles purely arbitrary; it has its foundation in the harmonic generation, at leaſt to a certain point.

If you give the perfect concord major to the tonic, the dominant, and ſub-dominant, you will have all the ſounds of the diatonic ſcale for the major mode. To have that of the minor mode, leaving always the major third to the dominant, give the

minor

minor third to the two other concords. Such is the analogy of the mode.

As this medley of major and minor concords introduces, into the minor mode, a falſe relation between the ſixth note and the ſenſible, we ſometimes give, to avoid this falſe relation, a major third to the fourth note in aſcending, or the minor third to the dominant in deſcending, particularly by variation; but in that caſe there are exceptions.

There are properly only two modes, as we have juſt ſeen; but as there are twelve fundamental ſounds, which give as many tones in the ſyſtem, and as each of theſe tones is ſuſceptible of the major and minor modes, we may compoſe in twenty-four modes or methods. There are even thirty-four poſſible in the method of marking the notes, but in practice we exclude ten, which, in reality, are only the repetition of ten others, under relations much more difficult, where all the chords would change their names, and wherein we ſhould, with difficulty, know our ſituation. Such are the major modes on the dieſis'd notes, and the minor modes on the B's flat. So, inſtead of compoſing in ſol dieſis major third, you will compoſe in la B flat, which gives the ſame touches; and inſtead of compoſing in re B flat minor, you will take ut dieſis by the ſame calculation, viz. to avoid on one ſide an F double dieſis, which would become a G natural, and on the other a B double, which would become a natural A. We do not always remain in the tone, or the mode, by which we begin an air, but, whether for expreſſion, or for variety, we change the tone and mode, according to harmonic analogy, returning, however, always to that, which he has made to be firſt heard, which is called to modulate.

From thence ariſes a new diſtinction of the mode in principal and relative: the principal is that by which the piece begins and finiſhes; the relatives are thoſe which are intermixt with the principal in the courſe of the modulation. (Vide Modulation.)

The Sieur Blainville, an eminent muſician of Paris, propoſed, in 1751, the attempt of a third mode, which he calls mixt mode, becauſe it partakes in the modulation of the two others, or is rather compoſed of them; a medley which the Author does not look upon as inconvenient, but rather as an advantage, and a ſource of variety, and of liberty in the airs and harmony.

This new mode not being given by the analyſis of three concords, as the two others, is not determined, like them, by harmonies eſſential to the mode, but by an entire gamut, which is ſuitable to it, as well in aſcending as falling; ſo that in our two modes the gamut is given by the concords, and in the mixt mode, the concords are given by the gamut.

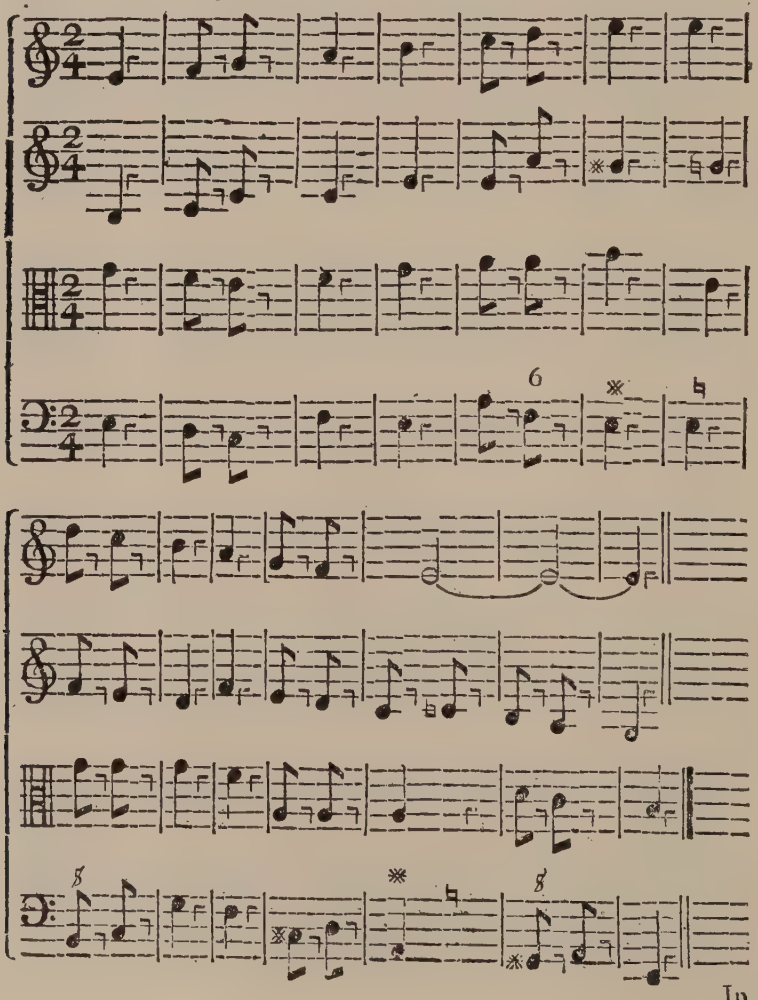
The

The formula of this gamut is in the aſcendant and deſcendant ſucceſſion of the following notes:

Mi, fa, ſol, la, ſi, ut, re, mi,

whoſe eſſential difference, in regard to the melody, is in the poſition of the two ſemi-tones; the firſt of which is found between the tonic, and the ſecond note; and the other between the fifth and ſixth; and, in regard to harmony, in that which it bears on the tonic minor third in beginning, and major in finiſhing, as may be ſeen.

Gamut and Accompaniment of the mixt Mode of Mr. Blainville.



In

In the accompaniment of this gamut, as well in aſcending or falling, as it was given by that author, and executed in the ſpiritual concert the 30th of May, 1751.

It is objected to the Sieur de Blainville, that his mode has neither concord, eſſential chord, or cadence ſuitable to it, and which diſtinguiſhes ſufficiently major or minor. He anſwers to this, that the difference of his mode is leſs in harmony than melody, and leſs in the mode than even in the modulation; that it is diſtinguiſhed in its beginning from the major mode by its minor third, and in its end from the minor mode by its plagal cadence. To which we anſwer, that a modulation which is not excluſive is not ſufficient to eſtabliſh a mode, that its own is inevitable in the two other modes, particularly in the minor; and, in regard to its plagal cadence, that it has neceſſarily a place in the ſame minor mode every time that we paſs from the concord of the tonic to that of the dominant, as that was formerly practiſed even on the finals in the plagal modes, and in the tone of the fourth. From whence it is concluded, that his mixt mode is leſs a peculiar kind, than a new denomination with methods for intermixing and combining the major and minor modes, as ancient as harmony, practiſed in every age: and that appears ſo true, that even in beginning his gamut, the author neither dares to give the fifth or ſixth to his tonic, for fear of determining a tonic in minor mode by the firſt, or a mediant in major mode by the ſecond. He leaves an equivocation in not filling his concord.

But whatever objection may be made againſt the mixt mode, whoſe name is more rejected than its practice, this will not hinder the matter, with which the author eſtabliſhes and treats it, from making itſelf known to a man of ſenſe, and a muſician well verſed in the principles of his art.

The ancients differed greatly on the definitions, diviſions, and names of their tones or modes. Obſcure in every part of their muſic, they are almoſt unintelligible in regard to this. All agree, its true, that a mode is a certain ſyſtem, or a conſtitution of ſounds; and, it appears, that this conſtitution is nothing elſe in itſelf than a certain octave filled with all the intermediate ſounds, according to the genus. Euclid and Ptolomy ſeem to make it conſiſt in the different poſitions of the two ſemi-tones of the octave, in relation to the principal chord of the mode, as we may ſee ſtill in the eight tones of church-muſic; but the greateſt number appear to place this difference only in the place which the diapaſon of the mode employs in the general ſyſtem, that is, inaſmuch as the baſe or principal chord of the mode is ſharper or flatter, being taken in different parts of the ſyſtem; all the chords of the ſeries always preſerving a ſimilar connection with

the fundamental, and, conſequently, changing the concord at each mode to preſerve the analogy of this connection: ſuch is the difference of the tones in our muſic.

According to the firſt ſenſe, there would be only ſeven poſſible modes in the diatonic ſyſtem, and, in effect, Ptolomy admits no more; for there are only ſeven methods to vary the poſition of two ſemi-tones in relation to the fundamental ſound, preſerving between theſe two ſemi-tones the preſcribed interval. According to the ſecond ſenſe, there would be as many poſſible modes as ſounds, i. e. an infinity; but if we confine ourſelves, even in the diatonic ſyſtem, there will be no more than ſeven found, unleſs we chuſe to take, as new modes, thoſe which would be eſtabliſhed in the octave of the firſt.

By combining together theſe two methods, we now want only ſeven modes; for if theſe modes are taken in different places of the ſyſtem, we find, at the ſame time, the fundamental ſounds diſtinguiſhed from flat to ſharp, and the two ſemi-tones differently ſituated in relation to the principal ſound.

But beſides theſe modes, we may form many others, by taking in the ſame ſeries, and on the ſame fundamental ſound, different ſounds, as the eſſential chords of the mode: for inſtance, when we take for dominant the fifth of the principal ſound, the mode is authentic; it is plagal if we chooſe the fourth; and there are properly two different modes on the ſame fundamental. Moreover, as to conſtitute an agreeable mode, we muſt, ſay the Greeks, render the fourth and fifth juſt, or, at leaſt, one of the two; it is evident that we have, in the extent of the octave, only five fundamental ſounds, on each of which may be eſtabliſhed an authentic mode and a plagal. Beſides theſe ten modes, we find other two; the one authentic, which cannot furniſh a plagal, becauſe its fourth forms the triton; the other plagal, which cannot furniſh an authentic, becauſe its fifth is falſe. It is, perhaps, in this manner that we muſt underſtand a paſſage of Plutarch, where the muſic complains that Phrynis has corrupted it by deſiring to draw from five, or, rather ſeven chords, twelve different harmonies. Here then are twelve poſſible modes in the extent of an octave, or two diſjoint tetrachords: if we come to join theſe two tetrachords together, that is, to give a B flat to the ſeventh in cutting off the octave; or if we divide the entire tones by chromatic intervals, to introduce therein new intermediate modes, or if, having an attention to the differences only, from flat to ſharp, we place other modes to the octave of the preceding; all this will furniſh different methods of multiplying the number of the modes far beyond twelve. And thoſe are the only methods of explaining the different numbers of the modes admitted or rejected by the ancients at different times.

The

The ancient muſic being then confined within the narrow bounds of the tetachord, the pentachord, the hexachord, the eptachord, and the octachord, there were at firſt only three modes admitted, whoſe fundamentals were at a tone diſtance from each other. The flatteſt of the three was called the dorian, the phrygian was in the middle, and the ſharpeſt was the lydian. In dividing each of theſe tones into two intervals, place was made to the two other modes, the ionian and æolian, the firſt of which was inſerted between the doric and phrygian, the ſecond between the phrygian and lydian.

In the end, the ſyſtem being extended to ſharp and flat, the muſicians eſtabliſhed on each ſide, new modes which took their denomination from the five firſt, by joining the prepoſition hyper, upon, for thoſe above, and the propoſition hypo, under, for thoſe below. Wherefore the lydian mode was followed by the hyper-dorian, the hyper-ionian, the hyper-phrygian, the hyper-æolian, and the hyper-lydian in aſcending; and after the dorian mode came the hypo-lydian, the hypo-æolian, the hypo-phrygian, the hypo-ionian, and the hypo-dorian in deſcending. We find the numbering of theſe fifteen modes in Alypius, a Greek author.

# A GENERAL TABLE

## Of all the Modes in the Ancient Muſic.

N. B. As authors have given different names to a great number of theſe modes, the names leaſt uſed are placed in ſmaller characters.

| | | | |
|---|---|---|---|
| Sharp. | 15 | Si — | Hyper Lydian. |
| | 14 | Si B flat | Hyper-Æolian. |
| | 13 | La — | Hyper-Phrygian.<br>Hyper-mixo-Lydian.* |
| | 12 | La B flat | Hyper-Ionian.<br>Hyper-Iaſtian.<br>Mixo-Lydian aigu. |
| | 11 | Sol . | Hyper-Dorian.<br>Mixo-Lydian. |
| Middle. | 10 | Fa Dieſis | Lydian. |
| | 9 | Fa — | Æolian.<br>Lydian flat. |
| | 8 | Mi — | Phrygian. |
| | 7 | Mi B flat | Ionian.<br>Iaſtian.<br>Phrygian flat. |
| | 6 | Re — | Dorian.<br>Hypo-mixo-Lydian. |
| Flat. | 5 | Ut Dieſis | Hypo-Lydian. |
| | 4 | Ut — | Hypo-Æolian.<br>Hypo-Lydian flat. |
| | 3 | Si — | Hypo-Phrygian. |
| | 2 | Si B flat | Hypo-Ionian.<br>Hypo-Iaſtian.<br>Hypo-Phrygian flat. |
| | 1 | La — | Hypo-Dorian.<br>Common.<br>Locrian. |

Their order and their intervals expreſſed by the names of the notes in our muſic. But we muſt take notice, that the hypo-dorian

* I have here placed the hyper-mixo-lydian mode, finding it ſo marked in my manuſcripts under the citation of Euclid. But the true place of this mode ought to be, I think, a ſemi-tone above the hyper-lydian; for which reaſon Euclid has been deceived, or, that I have erroneouſly tranſcribed it.

dorian was the only mode executed in its whole extent; during the time that the reſt aſcended, the ſounds in ſharp were cut off, not to exceed the extent of the voice. This obſervation ſerves to the intelligence of ſome paſſages of the ancients, by which they ſeem to ſay, that the flatteſt modes had a ſharper air, which was true, in that theſe airs were raiſed more above the tonic. Thro' an ignorance of this, Le Doni has been greatly embarraſſed in theſe apparent contradictions.

Of all theſe modes, Plato rejected many, as capable of changing the manners. Ariſtoxenes, in conjunction with Euclid, admitted only thirteen, ſuppreſſing the two moſt raiſed, viz. the hyper-æolian and hyper-lydian. But in the work which remains to us from Ariſtoxenes, he named only ſix, on which he connects the different ſentiments, which were permanent in his time. Laſtly, Ptolomy reduced the number of theſe modes to ſeven, ſaying, that the modes were not introduced in the deſign of varying the airs according to flat and ſharp, for it is evident that they might have been multiplied much beyond fifteen, but rather for the ſake of facilitating the paſſage of one mode to another, by conſonant intervals eaſy to ſound.

He confined all the modes in the ſpace of an octave, of which the doric mode ſerved as a centre, ſo that the mixo-lydian was a fourth above, and the hypo-dorian was a fourth below; the phrygian a fifth above the hypo-dorian; the hypo-phrygian a fourth below the phrygian; and the lydian a fifth above the hypo-phrygian; from whence it appears, that by reckoning from the hypo-dorian, which is the loweſt mode, there was, to the hypo-phrygian, the interval of a tone; from the hypo-phrygian to the hypo-lydian, another tone; from the hypo-lydian to the dorian, a ſemi-tone; from that to the phrygian, a tone; from the phrygian to the lydian, another tone; and from the lydian to the mixo-lydian, a ſemi-tone; which forms the extent of a ſeventh in this order.

1—Fa—Mixo-Lydian.
2—Mi—Lydian.
3—Re—Phrygian.
4—Ut—Dorian.
5—Si—Hypo-Lydian.
6—La—Hypo-Phrygian.
7—Sol—Hypo-Dorian.

Ptolomy aboliſhed all the other modes, pretending that a greater number could not be placed in the diatonic ſyſtem of an octave, all the chords which compoſed it being found employed. Thoſe are the ſeven modes of Ptolomy, which, by joining the hypo-mixo-lydian, added, they ſay, by Aretin, form at preſent the eight tones of church-muſic. (Vide Tones of the Church.)

This is the cleareſt notion that can be drawn from the tones or modes of ancient muſic, whilſt they were looked upon as differing only from ſharp to flat, but they had ſtill other differences which characterized them more particularly in regard to the expreſſion. They were drawn from the genus of poetry which was ſet to muſic, from the nature of the inſtrument which ſhould accompany it, from the rhyme and cadence therein obſerved, from the form in which certain airs were placed amongſt certain people, and from whence are derived originally the names of the principal modes, the doric, the phrygian, lydian, ionian, and æolian.

There were alſo other ſorts of modes, which might have been better called ſtyles or genera of compoſition. Such were the tragic mode deſtined for the theatre; the Nomiach mode conſecrated to Apollo; the Dithyrambic to Bacchus, &c. (Vide Style and Melopœa.)

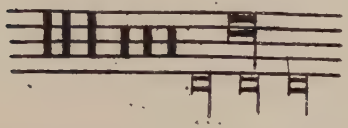
In our ancient muſic, they called alſo modes, in reference to the meaſure or the time, certain methods of fixing the relative powers of all the notes by a general ſign: the mode was then nearly what is now called meaſure; it was marked in the ſame manner after the cleff, by circles and demi-circles, punctuated or without points, followed by the cyphers 2 or 3 differently combined, to which were added or ſubſtituted in the courſe, different perpendicular lines, according to the mode, in number and in length; and it is from this ancient cuſtom, that the uſe of the ( and ( barr'd has remained to us. (Vide Prolation.)

There were, in this ſenſe, two kinds of modes, the major, which was connected to the maximum; and the minor, which was for the longue. Each was divided into perfect and imperfect.

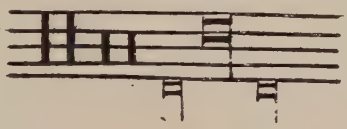
The major perfect mode was marked with three lines, each of which filled three ſpaces of the ſtave; and three others, which filled only two. Under this mode the maximum was equal to three longues.

Minor.

Major Perfect Mode.



The major imperfect mode was marked by two lines, each of which croſſed three ſpaces, and two others which croſſed only two, and in that caſe the maximum to two longues only.

Major Imperfect Mode.

The minor perfect mode was marked by one ſingle line which croſſed three ſpaces, and the longue was equal to three breves.

Minor Perfect Mode.

The minor imperfect mode was marked by a line which croſſed two ſpaces only, and its longue was equal only to two breves.

Minor Imperfect Mode.

The Abbe Bropard has improperly mixed the circles and demi-circles with the figures of thoſe modes. Thoſe reunited ſigns had no place in the ſimple modes, but only when the meaſures were double or conjoint.

All this has been long ſince out of uſe: but we muſt neceſſarily underſtand theſe ſigns to be ſkilled in decyphering the ancient muſic, in which the moſt ingenious muſicians are often greatly embarraſſed.

MODERATE. This word expreſſes a middle movement between the ſlow and lively: It anſwers to the Italian andante. (Vide Andante.)

MODIFICATION. An operation by which, thro' means of a trifling alteration in the intervals, making the difference of two neighbouring ſounds vaniſh, they are confounded in one, which, without diſguſting the ear, forms the reſpective intervals of each. By this operation, we ſimplify the ſcale in diminiſhing the number or neceſſary ſounds. Without the modification, inſtead of twelve ſounds only, which the octave contains, there would be more than ſixty wanting to modulate in all the tones.

On the organ, the harpſichord, and every other inſtrument with keys, there neither is, nor can be, an interval perfectly in concord, except the octave only. Its numerical powers are only three major thirds, or four minor thirds, before the making a juſt octave; the one paſs it, and the others do not reach it.

| | 5 | 5 | | 5 | | 125 | | 128 | | 2 | | 6 | | 6 | | 6 | | 1295 | | 12 | | 2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| For | — | + | — | + | — | = | — | ◁ | — | = | — | & | — | + | — | + | — | = | — | ▷ | — | = | — |
| | 4 | 4 | | 4 | | 64 | | 64 | | 1 | | 5 | | 5 | | 5 | | 623 | | 6-8 | | 1. |

Wherefore we are conſtrained to enforce the major thirds, and to weaken the minor, ſo that the octaves, and all the other intervals, may correſpond exactly, and that the ſame touches may be uſed under their different connections. In one moment I will explain the method of managing this.

This neceſſity was not felt immediately, or diſcovered before the meliorating of the muſical ſyſtem. Pythagoras, who firſt found the connection of the harmonic intervals, pretended that theſe connections were obſerved in all the mathematical rigour, without allowing any thing to the tolerance of the ear. This ſeverity might be very ſuitable in its time, when the whole extent of the ſyſtem was ſtill bounded by ſo ſmall a number of chords. But as the greateſt part of the ancient inſtruments were compoſed of chords which were touched a vide, and as, in conſequence a chord was neceſſary for each ſound, in proportion as the ſyſtem extended, they perceived that the rule of Pythagoras, multiplying the chords too much, hindered them from drawing from them their proper uſes.

Ariſtoxenes, the diſciple of Ariſtotle, ſeeing how much the exactneſs of calculations hurt the progreſs of muſic, and the facility of the execution, took all of a ſudden the other extremity, abandoning the calculation almoſt entirely; he pleaded to the judgment of the ear only, and rejected, as uſeleſs, the whole that Pythagoras had eſtabliſhed.

This formed in muſic two ſects, which have for ſome time divided the Greeks, the one of the Ariſtoxenians, which were the muſicians

muſicians of practice; the other, of the Pythagoreans, which were the philoſophers. (Vide Ariſtoxenians and Pythagoreans.)

In the end, Ptolomy and Didymus, finding, with reaſon, that Pythagoras and Ariſtoxenes had fallen into two exceſſes equally faulty, and conſulting at the ſame time ſenſe and reaſon, laboured each, on their own part, towards a reformation of the ancient diatonic ſyſtem. But as they were not greatly removed from the principles eſtabliſhed for the diviſion of the tetrachord, and, at laſt, diſtinguiſhing the difference between the major and minor tones, they did not dare touch upon the one to divide it, as the other, by a chromatic chord, into two equal parts: the ſyſtem continued a long time in a ſtate of imperfection, which did not permit us to perceive the true principle of the modification.

Laſtly came Gui d'Arezzo, who, in ſome reſpects, re-founded the muſic, and, as they ſay, invented the harpſichord. Moreover, it is certain, that that inſtrument could not exiſt any more than the organ, had not the modification been found out at the ſame time; without which, it is impoſſible to accord them, and impoſſible, at leaſt, that the firſt invention can have much preceded the ſecond. This is nearly all that we know of it.

But though the neceſſity of the modification has been long ſince known, it is different, in regard to the beſt rule, to be followed for its determination.

The laſt age, which was the age of diſcoveries in every kind, is the firſt which has given us any clear inſight on this head. Le P. Merſenne, and Monſ. Loulié, have made calculations; Monſ. Sauveur has found diviſions which furniſh all poſſible modificatioı . Laſtly, Monſ. Rameau, after all the reſt has imagined to nave found the true theory of modification firſt, and has even pretended, on this theory, to eſtabliſh, as new, a very ancient practice, which I ſhall ſpeak of inſtantly.

I have ſaid that it was neceſſary, for temperating the ſounds of the keys, to enforce the major thirds to weaken the minor, and to diſtribute theſe alterations ſo as to render them as little ſenſible as poſſible. For this purpoſe, we muſt return on the concord of the inſtrument, and this concord is generally made by fifths: it is therefore by its effect on the fifths, that we ſhould conſider the modification.

If we tune very juſtly four fifths together, as ut ſol re la mi, we ſhall find that this fourth fifth mi, with the ut, from whence we ſet off, will form a major diſcordant third, and much too ſtrong; and, in effect, this mi, produced as the fifth of la, is not the ſame ſound which ought to form the major third of ut. Herein lies the proof.

The

The connection of the fifth is $\frac{2}{3}$ or $\frac{1}{3}$ on account of the octaves 1 and 2 taken indifferently for each other. Wherefore the ſucceſſion of fifths, forming a triple progreſſion, will give ut 1, ſol 3, re 9, la 27, and mi 81.

Let us now conſider this mi as major third of ut: its connection is $\frac{4}{5}$ or $\frac{1}{5}$, four being only the double octave of one. If from octave to octave, we draw near to the mi of the precedent, we ſhall find mi 5, mi 10, mi 20, mi 40, and mi 80. Wherefore the fifth of la being mi 81, and the major third of ut being mi 80, theſe two mi's are not the ſame, and their references are $\frac{80}{81}$, which form preciſely the major comma.

If we purſue the progreſſion of fifths as far as the twelfth power, which happens at ſi dieſis, we ſhall find, that this ſi exceeds the ut, whoſe uniſon it ought to make in the connection of 531441 and 524288, a connection which gives the comma of Pythagoras. So that by this calculation, the ſi dieſis ought to exceed the ut of three major comma's; and by the other, it exceeds it only by the comma of Pythagoras.

But the ſame ſound mi which forms the fifth of la, muſt alſo ſerve to form the major third of ut; the ſame ſi dieſis which forms the twelfth fifth of the ſame ut, muſt form the octave alſo; and laſtly, theſe different concords muſt concur to conſtitute the general ſyſtem without multiplying the chords. This is what is executed by means of the modification.

For this purpoſe, firſt, we begin by ut in the middle of the keys, and weaken the four firſt fifths in aſcending, until that the fourth mi forms a major third, abſolutely juſt with the firſt ſound ut, which we call the firſt proof.

Secondly, In continuing to tune by fifths, as ſoon as we are arrived on the dieſis's, we enforce the fifths a little, though the thirds may ſuffer, and when we are arrived to the ſol dieſis, we ſtop. This ſol dieſis ought to make, with the mi, a juſt major third, or at leaſt tolerably ſo; this is the ſecond proof.

Thirdly, We take the ut again, and tune the fifths in flat, viz. fa, ſi B flat, &c. weak of conſequence; then enforcing them by degrees, that is, weakening the ſounds till we come to the re B flat, which, taken as ut dieſis, ought to be found in concord, and form a fifth with the ſol dieſis, at which we had before ſtopt. This is the third proof.

The

The laſt fifths will be found rather ſtrong, as well as the major thirds, which renders the major thirds of ſi B flat, and mi B flat, heavy, and rather rough. But this roughneſs will be ſupportable if the partition is well formed; and beſides, theſe thirds, by their ſituation, are leſs uſed than the firſt, and ought to exiſt only by choice.

The organiſts and factors look upon this modification as the moſt perfect that can be uſed. In effect, the natural tones enjoy, by this means, all the purity of harmony; and the tranſpoſed tones, which form leſs frequent modulations, offer great aſſiſtance to the muſician when he is in want of marked expreſſions; for it is good to obſerve, ſays Monſ. Rameau, that we receive different impreſſions from the intervals in proportion to their different alterations. For inſtance, the major third, which naturally excites a joy in us, impreſſes on us even the ideas of fury, when too ſtrong; and the minor third, which inſpires us with tenderneſs and ſweetneſs, changes our ſenſations into thoſe of ſorrow, when too weak.

Ingenious muſicians, continues the ſame author, know how to make a good uſe of theſe different effects of the intervals, and, by the expreſſion which they draw from them, make the alteration flouriſh, which might be condemned.

But in his harmonic generation, this ſame Monſ. Rameau ſpeaks quite another thing. He reproaches himſelf for his condeſcenſion for actual cuſtom, and deſtroying all that he had before eſtabliſhed; he gives a formula of eleven methods proportionate between the two terms of the octave, on which formula he inſiſts on the whole ſucceſſion of the chromatic ſyſtem being eſtabliſhed, ſo that this ſyſtem reſulting from the twelve ſemi-tones perfectly equal, it is of neceſſity that all the intervals which are formed from it, ſhould be perfectly equal between themſelves.

For practice, ſays he, take whatever key you pleaſe; tune then its fifth juſt, diminiſh it a very little; proceed in this manner from one fifth to another, always aſcending, that is, from ſharp to flat, until the laſt whoſe ſharp ſound muſt have been the flat of the firſt, you may then be certain that the harpſichord will be quite in tune.

This method which Monſ. Rameau propoſes, had already been propoſed, and aboliſhed by the famous Couperin. We may find it alſo at full length in P. Merſenne, who names one Gallee as its author, and who has even taken the trouble to calculate the eleven proportionate methods, of which Monſ. Rameau gives us the Algebraic formula.

In

In ſpite of the ſcientific appearance of this formula, we do not find that the practice which reſults from it has been yet approved, either by muſicians or factors. The firſt cannot reſolve to deprive themſelves of the energic variety which they find in the different affections of the tones which the eſtabliſhed modification occaſions. Monſ. Rameau tells them in vain, that they are deceived, that the variety is found in the uniſon of the modes, or in the different degrees of the tonics, and not at all in the alteration of the intervals: the muſician anſwers, that the one does not exclude the other; that he does not think himſelf convinced by an aſſertion, and that the different affections of the tones are not in any reſpect proportionate to the different degrees of their finals. For, ſay they, tho' there is only a ſemitone diſtance between the final of re and that of mi B flat, as between the final of la and that of ſi B flat; however, the ſame muſic will affect us very differently in A la mi re, than in B fa; and in D ſol re, than in E la fa; and the attentive ear of the muſician can never be deceived, though even the general tone ſhould be raiſed or lowered a ſemi-tone and more: an evident proof that this variety comes elſewhere than ſimply from the different elevation of the tonic.

In regard to inſtrument makers, they find, that a harpſichord tuned in this manner, is not really ſo concordant as Monſ. Rameau pretends. The major thirds appear to them rough and diſguſting; and when we tell them that they have only to act in the alteration of thirds, as they did before in that of fifths, they anſwer, that they can't conceive how the organ can be managed to ſuppreſs the beatings which are heard therein by this method of tuning, or how the ear can fail to be diſguſted.

Since, by the nature of conſonances, the fifths may be more changed than the third without diſguſting the ear, or cauſing beatings, is it not neceſſary to throw the alteration on that ſide where it is leaſt diſguſting, and to leave the intervals, in preference, more juſt where they cannot be changed without being rendered diſcordant.

P. Merſenne aſſures us, that, in his time, they ſaid that the firſt who practiſed ſemi-tones on the keys, tuned all the fifths nearly according to the equal concord propoſed by Monſ. Rameau, but that their ear not being able to endure the diſcordance of the major thirds, neceſſarily too ſtrong, they modified the concord by weakening the firſt fifths to lower the major thirds. It appears, therefore, that to uſe ones ſelf to this method of concord, is a habit difficult to be followed by an exerciſed and ſenſible ear.

As

As to what remains, I cannot be prevented to remind my readers of what I have ſaid at the word conſonance, on the cauſe of that pleaſure which the ear receives from conſonances, drawn from the ſimplicity of the connections. The connection of a modified fifth, according to Monſ. Rameau's method, is this, $\frac{4}{V}\!\!-\!\!-\frac{3}{8o} + \frac{4}{V}\!\!-\!\!-\frac{}{81}$. This connection, however, pleaſes the ear. I would know whether its ſimplicity is the cauſe of it.

MODULATION. This is properly the method of eſtabliſhing and treating the mode; but this word, at preſent, is more generally taken for the art of conducting the harmony, and the air ſucceſſively in ſeveral modes, by a method agreeable to the ear, and conformable to rules.

If the mode is produced by harmony, from thence alſo ariſe the laws of modulation. Theſe laws may be ſimply conceived, but are difficult to be obſerved. Herein lies their conſiſtent rules.

To modulate well in a ſame tone, we muſt firſt go through all its ſounds with a fine muſic, by ſtriking the eſſential chords oftener, and reſting on them longer: that is to ſay, that the ſenſible concord, and the concord of the tonic, ought to be ſhewn therein frequently, but under different appearances, and by different courſes, to prevent the monotony. Secondly, To eſtabliſh Cadences and ſtops only on theſe two concords, or, at moſt, on that of the ſub-dominant. Thirdly and laſtly, never to alter any of the ſounds of the mode; for we cannot, without quitting it, make a dieſis or a B flat be heard, which does not belong to it, or remove any one that does belong to it.

But to paſs from one tone to another, we muſt conſult the analogy, and pay attention to the connection of the tonics, and to the quantity of chords common to the two tones.

Let us now depart from the major mode: whether we conſider the fifth of the tonic, as having with it the ſimpleſt of all the connections after that of the octave, or whether we conſider it as the firſt of the ſounds which enter in the reſonnance of this ſame tonic, we ſhall always find that this fifth, which is the dominant of the tone, is the chord on which we may eſtabliſh the moſt analogous modulation to that of the principal tone. This dominant, which formed part of the perfect concord of the firſt tonic, forms alſo a part of its own, of which it is the fundamental ſound. There is then an union between theſe two concords. Moreover, this ſame dominant, bearing, as well as the concord, a perfect major concord by the principle of reſonance, theſe two concords differ between themſelves only by the diſſonance, which, paſſing from the tonic to the dominant, is the ſixth added; and from the dominant, repaſſing to the tonic, is the ſe-

venth. Moreover, theſe two concords, thus diſtinguiſhed by the diſſonance which ſuits each, form, by the ſounds which compoſe them, rang'd in order, preciſely the octave or diatonic ſcale, which we call gamut, which determines the tone.

This ſame gamut of the tonic forms, only changed by a dieſis, the gamut of the tone of the dominant, which ſhews the great analogy of theſe two tones, and gives the facility of paſſing from one to the other by means of a ſingle alteration. The tone of the dominant is then the firſt which is preſented after that of the tonic in the order of modulations. The ſame ſimplicity of connection which we find between a tonic and its dominant, is alſo found between the ſame tonic and its ſub-dominant; for the fifth, which the dominant forms in ſharp with this tonic, the ſub-dominant forms in flat; but this ſub-dominant is the fifth of the tonic only by a variation; it is directly fourth by placing this tonic in flat, as it ought to be, which eſtabliſhes the gradation of the connections: for in this ſenſe, the fourth, whoſe connection is from three to four, follows the fifth immediately, whoſe connection is from two to three. If this ſub-dominant does not enter, in the ſame manner, in the concord of the tonic, in return, the tonic enters into its concord. For ſhould ut mi ſol be the concord of the tonic, that of the ſub-dominant will be fa la ut; wherefore, it is the ut which forms here the union, and the two other ſounds of this new concord are preciſely the two other ſounds of the precedent. Moreover, we muſt not change more ſounds for this tone than for that of the dominant: there are in each all the ſame chords of the principal tone, very nearly. Give a B flat to the ſenſible note ſi, and all the notes of the tone of ut will ſerve to that of fa. The tone of the ſub-dominant is not then leſs analogous to the principal tone than that of the dominant.

We ought alſo to take notice, that after having uſed this firſt modulation to paſs from a principal tone ut to that of its dominant ſol, we are obliged to uſe the ſecond to return to the principal ſound; for if ſol is dominant of the tone of ut, ut is ſub-dominant to the tone of ſol; wherefore, one of theſe modulations is not leſs neceſſary than the other.

The third ſound, which enters in the concord of the tonic, is that of its third or mediant, and is alſo the ſimpleſt of the connections after the two precedent $\frac{2}{3}\ \frac{3}{4}\ \frac{4}{5}$.

Here then is a new modulation, which is preſented, and as much more analogous, as two of the ſounds of the principal tonic enter alſo into the minor concord of its mediant; for the firſt concord

concord being ut mi ſol, this will be mi ſol ſi, where we ſee that mi and ſol are common.

But what removes this modulation to a little diſtance, is the quantity of ſounds which muſt be changed, even for the minor mode, which is moſt ſuitable to this mi. I have given before the formula for theſe two modes; therefore, applying this formula to the minor mode mi, we find, in reality, only the fourth ſound fa changed by a dieſis in deſcending; but in riſing, we find two others alſo, viz. the principal tonic ut, and its ſecond note re, which becomes here a ſenſible note: it is certain, that the alteration of ſo many ſounds, and particularly of the tonic, diſtances the mode, and weakens the analogy.

If we vary the third as we have the fifth, and take that third below the tonic on the ſixth note la, which we ought alſo to call ſub-mediant, or mediant below, we ſhall form on this la a modulation more analogous to the principal tone than was that of mi; for the perfect concord of this ſub-mediant being la ut mi, we find therein, as in that of the mediant, two of the ſounds which enter into the concord of the tonic, viz. ut and mi; and moreover, the ſcale of this new tone being compoſed, at leaſt in deſcending, of the ſame ſounds as that of the principal tone, and having only two ſounds changed in aſcending, i. e. one leſs than the ſcale of the mediant; it follows thence, that the modulation of the ſixth note is preferable to that of this mediant, inaſmuch, as the principal tonic forms therein one of the eſſential chords of the mode, which is more ſuitable for connecting the idea of the modulation. The mi may follow afterwards.

Here then are four chords, mi fa ſol la, on each of which we may modulate, going out of the major tone of ut. Let the re and ſi remain the two harmonies of the dominant. This laſt, as a ſenſible note, cannot become tonic by any good modulation, at leaſt immediately. This would be applying roughly to the ſame ſound, ideas too much oppoſed, and giving it an harmony too diſtant from the principal. For the ſecond note re, we may alſo, by favour of the conſonant direction of the fundamental baſs, modulate therein in minor third, provided that we do not remain therein more than an inſtant, ſo that we may not have time to forget the modulation of the ut, which itſelf is changed; otherwiſe it would be neceſſary, inſtead of returning immediately in ut, to paſs by other intermediate tones, where it would be dangerous to be led into an error.

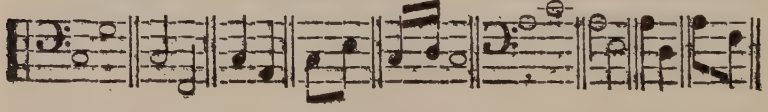
By following the ſame analogies, we ſhall modulate in the following order to go out of a minor tone: the mediant firſt, then the dominant, the ſub-dominant, and the ſub-mediant, or ſixth note. The mode of each of theſe acceſſary tones is determined

by its mediant, taken in the ſcale of the principal tone. For inſtance, going out of a major tone ut to modulate on its mediant, we render the mode of this mediant minor, becauſe the dominant ſol of the principal tone forms a minor third on this mediant mi. On the contrary, going out of a minor tone la, we modulate on its mediant ut in major mode, becauſe the dominant mi of the tone, from whence we go out, forms a major third on the tonic of that wherein we enter, &c.

Theſe rules, confined in a general formula, are, that the modes of the dominant, and the ſub-dominant, are ſimilar to that of the tonic, and that the mediant and ſixth note bear the oppoſed mode. We muſt take notice, however, that in virtue of the right we have to paſs from major to minor, and reciprocally, in a ſame tone, we may alſo change the order of the mode from one tone to the other: but in thus removing from the natural modulation, we muſt be attentive to the return, for this is a general rule, which every piece of muſic ought to finiſh in the tone by which it began.

I have collected, in two ſhort examples, all the tones in which we may immediately paſs: the firſt, by going from the major mode; and the other by going from the minor mode. Every note expreſſes a modulation; and the power of the notes in each example, ſpecifies alſo the relative duration ſuitable to each of theſe modes, according to its connection with the principal tone.

Table of all the immediate Modulations.

Going out of the major mode. Going out of the minor.

Theſe immediate modulations furniſh the methods of paſſing by the ſame rules, in the moſt diſtant rules; and of immediately returning to the principal tone, which we muſt never loſe ſight of. But it is not ſufficient to know the courſes which we ought to follow; we muſt alſo know the method of entering on them. Here is the ſummary of the precepts which may be given in regard to this. In melody, we muſt, to expreſs the modulation we have choſen, only make the alterations be heard, which it produces in the ſounds of the tone from whence we go out, to render them proper to the tone wherein we enter.

Are we in ut major? We have only to ſound a fa dieſis to expreſs the tone of the dominant, or a ſi B flat to ſpecify the tone of the ſub-dominant. Then paſs through the eſſential chords of the tone wherein you enter: If it is well choſen, your modulation will

will always be good and regular. In the harmony, there is a little more difficulty; for as the change of the tone muſt be made at the ſame time in all the parts, we ought to be careful, in the harmony and air, to avoid following two different modulations at the ſame time. Huyghens has very well remarked, that the proſcription of the two conſecutive fifths has this rule as its principle: in effect, we cannot form, in any manner, ſeveral juſt fifths together, between two parts, without modulating in two different tones.

To announce a tone, many perſons pretend that it is ſufficient to form the perfect concord of the tonic, and that this is indiſpenſable for the giving of the mode; but it is certain, that the tone cannot be determined but by the concord ſenſible or dominant: we muſt then make this concord be heard in beginning the new modulation. The beſt rule would be, that the ſeventh or minor diſſonance ſhould be always prepared therein, at leaſt, the firſt time that we make it audible; but this rule is not practicable in all the permitted modulations; and provided that the fundamental baſs is directed by conſonant intervals, that we obſerve the harmonic union, the analogy of the mode, and avoid the falſe relations, the modulation is always good. Compoſers give as another rule, to change the tone only after a perfect cadence, but this rule is uſeleſs, and nobody ſubmits to it.

All the poſſible methods of paſſing from one tone into another, are reduced to five for the major mode, and four for the minor, which we have announced by a fundamental baſs for each modulation.

| | Major. | | Minor. |
|---|---|---|---|
| Tone of the | Dominant — A | Tone of the | Mediant — F |
| | Sixth Note — B | | Dominant — G |
| | Mediant — C | | Sub-Dominant H |
| | Sub-Dominant D | | Sixth Note — I |
| | Second Note E | | Idem — — K |

If there is any other modulation which does not come within any of theſe nine, unleſs it be enharmonic, that modulation is infallibly bad. (Vide Enharmonic.)

TO MODULATE, Is to compoſe or prelude, whether in writing, or on an inſtrument, or with the voice, in following the rules of modulation. (Vide Modulation.)

MOLLARE, An epithet, given by Ariſtoxenes and Ptolomy, to a kind of the diatonic genus, and of the chromatic alſo, which I have ſpoken of at the word Genus.

In modern muſic, the word Mollare is only uſed in the compoſition of the word B mollare or B flat, in oppoſition to B ſharp, formerly called B rough.

Zarlin, however, calls diatonic mollare, a kind of the diatonic genus, which I have ſpoken of before. (Vide Diatonic.)

MONOCHORD, An inſtrument having only one chord, which is divided ad libitum by moveable bridges, the which ſerves to find the connections of the intervals, and all the diviſions of the harmonic canon. As the part of inſtruments does not appertain to my plan, I ſhall not extend any farther on this article.

MONODY, A ſong for a ſingle voice, in oppoſition to what the ancients called chorodies, or muſic executed by a band.

MONOLOGUE, The ſcene of an opera, wherein the actor is alone, and ſpeaks only to himſelf. It is in the monologues that all the force of muſic is diſcovered, the muſician being able to give ſcope to the whole fire of his genius, without being confined in the length of his pieces by the preſence of a ſecond ſpeaker.—Theſe kinds of recitative, which have a place, and cauſe ſuch an effect in the Italian opera, are only uſed in monologues.

MONOTONY, Is properly a pſalmody, or piece of muſic, which always moves on the ſame tone; but this word is at preſent uſed only in figured muſic.

MORES. A conſiderable part of the Greek muſic, called by them hermoſmenon, which conſiſted in underſtanding and chooſing the beautiful of every kind, and did not permit them to give to each ſentiment, to each object, to each character, all the forms of which it was ſuſceptible: but obliged them to confine themſelves to what was ſuitable to the ſubject, the occaſion, perſons, and circumſtances. The Mores conſiſted alſo in tuning and proportionating in ſuch a manner in a piece, all the parts of the muſic, the mode, the time, the rhyme, melody, and even the changes, that a certain conformity might be felt throughout the whole, which ſhould leave no diſagreement, but render it perfectly one. This ſingle part, the idea of which is not even known in our muſic, ſhews to what point of perfection an art might be carried, in which the pleaſing, ſuitable, and agreeable, was reduc'd to rules.

MOTET. This word, in ancient times, ſignified a very laboured compoſition, enriched with all the beauties of art, and this within a very ſhort period; from whence, according to ſome, it takes its name of motet, as if it was one ſingle word.

At preſent, the name of motet is given to every piece of muſic made in Latin words, as was cuſtomary in the Roman-church, as pſalms, hymns, antiennes, &c. and this, in its general ſenſe, is called Latin muſic.

The French ſucceeded better in this kind of muſic than in their own, the language being more favourable; but they make uſe of too great labour, and, as the Abbé du Bos has accuſed them, they

they play too much on the words. In general the Latin muſic has not ſufficient gravity for the uſe to which it is allotted. We ought not to aim therein at imitation, as in theatrical muſic. Sacred airs ought not to repreſent the tumult of the human paſſions, but only the majeſty of him to whom they are addreſſed, and the reſignation of ſoul in thoſe who pronounce them. Whatever may be expreſſed in the words, every other language in the air is a contrary ſenſe. We ſhould have, I do not ſay no piety, but no taſte, if we preferred the general muſic to that of the church, for the church itſelf.

The muſicians of the thirteenth and fourteenth age, gave the name of mottelus to that part which is now called counter-tenor. This name, and others as ſtrange, often cauſe a great embarraſſment to thoſe who ſtudy the decyphering of ancient manuſcripts of muſic, which was not written in partition as at preſent.

MOTIVE. This word is ſeldom uſed but in a technical ſenſe by the compoſers. It ſignifies the primitive and principal idea, on which the compoſer determines his ſubject and arranges his deſign. 'Tis the motive which bids him put pen to paper to write ſuch a thing, and not another. In this ſenſe, the principal motive ought to be always preſent in the mind of the compoſer, and he ought to manage that it ſhould be ſo alſo in that of his audience.

Beſides this motive, which is only the principal idea of the piece, there are particular motives, which are the determining ideas of the modulation, the union, the harmonic textures; and on theſe ideas, which we haſten in the execution, we judge if the author has properly followed his motives, or if he has taken the changes, as it often happens to thoſe who proceed note by note, and who are deficient in knowledge and invention. It is in this acceptation that we ſay, motive of the fugue, motive of the cadence, motive of the changes in the mode, &c.

TO MOVE. This term is uſed figuratively in muſic, and is ſaid of the ſucceſſion of ſounds, or concords, which follow each other in a certain order. "The baſs and treble move by contrary movements." "To move in counter-time," &c.

MOVEMENT, A degree of quickneſs or ſlowneſs, which the character of the piece we execute gives to the meaſure. Every kind of meaſure has a movement peculiar to itſelf, and which is deſigned in Italian by theſe words, Tempo giuſto. But beſides this, there are five principal modifications of movement, which, in the order from ſlow to quick, are expreſſed by the words, Largo, adagio, andante, allegro, preſto; and theſe words in Engliſh are rendered, by ſlow, moderate, pleaſing, gay, quick. We muſt, however, take notice, that, the movement always having much

leſs preciſion in the French muſic, the words that expreſs it have a ſenſe much more vague than in the Italian.

Each of theſe degrees is ſub-divided and modified into others alſo, in which we muſt diſtinguiſh thoſe which expreſs the degree only of quickneſs or ſlowneſs, as larghelto, andantino, allegretto, preſtiſſimo, and thoſe, moreover, which mark the character and expreſſion of the air, as agitato, vivace, guſtoſo, combrio, &c. The firſt may be rendered by all the muſicians, but there are only thoſe which have ſentiment and taſte, who feel and render the others.

Tho', in general, ſlow movements are ſuitable to ſorrowful paſſions, and animated movements to the gay, there are, however, often modifications by which a paſſion ſpeaks on the tone of another. It is true, that gayety cannot be expreſſed with ſlowneſs, but often the moſt lively griefs have the moſt unbounded language.

MOVEMENT, Is alſo the courſe or progreſs of ſounds from flat to ſharp, or from ſharp to flat: wherefore, when we ſay that we muſt, as much as poſſible, make the baſs and treble move by contrary movements, this ſignifies that one of the parts ought to aſcend, whilſt the other deſcends. Some call oblique movement, that wherein one of the parts remains in its place, whilſt the other aſcends or deſcends.

The ingenious Jerome Mei, in imitation of Ariſtoxenes, diſtinguiſhes in general, in the human voice, two kinds of movements, viz. that of the ſpeaking voice, which he calls continued movement, and which is not fixed till the moment we are ſilent; and that of the ſinging voice, which moves by determined intervals, and which he calls diaſtematic, or intervallative movement.

MUSETTE, A kind of air ſuitable to the inſtrument of this name, whoſe meaſure is two or three timed, the character ſweet and original, the movement a little ſlow, bearing generally a baſs in the line or point of the organ, ſuch as may make it a muſette, and which is ſo called on account of this baſs. On theſe airs we form the dances of a ſuitable character, and which alſo have the name of muſettes.

MUSICIAN. This name is given equally to him who compoſes muſic, and him who executes it. The firſt is alſo called compoſer. (Vide that word.)

The ancient muſicians were poets, philoſophers, and orators of the higheſt order. Such were Orpheus, Terpander, Sterichorus, &c. Boetius alſo will not honour with the name of muſician, him, who only practices the muſic by the ſervile uſe of fingers and voice, but him who poſſeſſes that knowledge by reaſon and ſpeculation. And it moreover ſeems, that to raiſe one's ſelf to the lofty expreſſions of oratorical and imitative muſic, we muſt have

have made the human paſſions, and the language of nature, our particular ſtudy. The muſicians, however, of our time, confined in general to the practicé of notes, and ſome turns in the air, cannot be highly offended, I imagine, if they are not eſteemed as great philoſophers.

MUSIC, The art of combining the ſounds in a manner pleaſing to the ear. This art becomes a ſcience, and even very profound, when we attempt to find the principles of theſe combinations, and the cauſes of the pleaſure which they inſpire us with. Ariſtides Quintilian defines muſic as the art of the beautiful, and pleaſing in the voices and movement. It is not ſtrange, that with definitions ſo vague and general, the ancients have given a prodigious extent to the art which they thus defined.

We generally ſuppoſe, that the word muſic is derived from muſa, becauſe we believe that the muſes have invented this art; but Kircher, after Diodorus, derives this word from an Ægyptian name, pretending, that it was in Ægypt that the muſic began firſt to eſtabliſh itſelf after the deluge, and that the firſt idea of the ſound was received by the reeds which grew on the banks of the Nile, when the wind blew in the hollow of their pipes. Whatever may be the etymology of this word, the origin of the art is certainly more applicable to mankind; and if the words did not begin with the air, it is at leaſt certain, that wherever we ſpeak, we ſing.

Muſic is naturally divided into theoretic or ſpeculative, and practical.

Speculative muſic is, if I may be allowed the expreſſion, the knowledge of muſical matter, that is, the different connections from flat to ſharp, quick to ſlow, ſour to ſweet, ſtrong to weak, of which the ſounds are ſuſceptible; connections, which comprehending all poſſible combinations of the muſic and ſounds, ſeem to comprehend alſo all the cauſes of the impreſſions which their ſucceſſion may form on the ear and the ſoul.

Practical muſic is the art of applying and making uſe of the principles of the ſpeculative; that is, to conduct and diſpoſe the ſounds in connection with the conſonance, in duration, ſucceſſion, in ſuch a manner, as that the whole may produce on the ear the propoſed effect. It is this art which is called compoſition. (Vide this word.) In regard to the actual production of the ſounds by voices or inſtruments, which is called execution, it is the part purely mechanic and operative, which, only ſuppoſing the faculty of ſounding the intervals juſt, of marking the durations true, to give to the ſounds the degree preſcribed in the tone, and the powers preſcribed in the time, requires rigorouſly no other knowledge than that of the characters of muſic, and cuſtom in expreſſing them.

Speculative

Speculative muſic is divided into two parts, viz. the knowledge of the connection of the ſounds, or their intervals, and that of their relative durations, that is, of the meaſure and time.

The firſt, is properly that which the ancients called harmonic muſic; it teaches in what conſiſts the nature of the air, and marks what is conſonant, diſſonant, agreeable, or diſpleaſing to the ear. In a word, it gives a knowledge of the different methods with which the ſounds affect the ear by their tone, their force, their intervals, which is equally applied to their concord, and their ſucceſſion.

The ſecond has been called rhymic, becauſe it treats the ſounds in regard to the time and quantity. It contains the explanation of the rhyme and metre, long meaſures and ſhort, lively and ſlow, the times and different parts into which they are divided, to apply to them the ſucceſſion of the ſounds.

The practical muſic is divided alſo into two parts, which anſwer to the two preceding.

That which anſwers to the harmonic muſic, and which the ancients called melopœa, contains the rules for combining and varying the conſonant and diſſonant intervals, in an agreeable and harmonious manner. (Vide Melopœa.)

The ſecond, which anſwers to the rhymic muſic, and which they call rythmopœa, contains the rules for the application of the times, feet, meaſures, in a word, for the practice of rhyme. (Vide Rhyme.)

Perphyrius gives another diviſion of muſic, whilſt it has for its object the mute and ſonorous movement; and, without diſtinguiſhing it into ſpeculative and practical, there are found in it the ſix following parts: the rhymic, for the movements of dancing; the metric, for the cadence and number of verſes; the organic, for the practice of inſtruments; the poetic, for the tones and accent of poeſy; the hypocritic, for the attitudes of pantomimes; and the harmonic, for the air.

The muſic is divided, at preſent, more ſimply into melody and harmony; for the rhymic is no longer regarded amongſt us, and the metric is very trifling, ſince our verſes, in airs, take nearly their meaſure from muſic, and loſe the little which they receive from it by themſelves.

By melody, we direct the ſucceſſion of the ſounds, ſo as to produce an agreeable air. (Vide Melody, Air, Modulation.)

Harmony conſiſts in uniting to each of the ſounds, in a regular ſucceſſion, two or more other ſounds, which, ſtriking the ear at the ſame time, flatter it by their concurrence. (Vide Harmony.)

We might, and, perhaps, ought to divide the muſic into natural and imitative. The firſt, confined to the phyſic of the ſounds only, and acting on the ſenſe only, cannot carry its impreſſions

to

to the heart, and gives ſenſations only more or leſs agreeable. Such is the muſic of the ſongs, hymns, cantics, and of all the airs, which are only combinations of melodious ſounds, and all muſic in general which is not harmonious.

The ſecond, by inflexions lively and accented, and, as it were, ſpeaking, expreſſes all the paſſions, paints every picture, renders every object, ſubmits the whole of nature to its ingenious imitations, and, by this means, conveys to the ſoul of the man thoſe ſentiments proper for moving it. This truly lyric and theatrical muſic was that of ancient poems, and it is that which at preſent we apply to the drama's, executed in muſic on our theatres. It is only in this muſic, and not in the harmonic or natural, that we muſt ſeek the cauſe of the prodigious effects which it formerly produced. How much ſoever we may ſeek for moral effects in the phyſic of ſounds only, we ſhall never find them, and our reaſoning will be without underſtanding.

The ancient writers differ greatly on the nature, the object, extent, and the parts of muſic. In general, they gave this word much more extenſive than that which remains to it at preſent. They not only comprehended, under the name of muſic, as we have ſeen, the dance, geſture, and poetry, but even the collection of all the ſciences. Hermes defines muſic as the knowledge of the order in every thing. This was alſo the doctrine in the ſchool of Pythagoras, and that of Plato, who taught, that every thing in the univerſe was muſic. According to Heſychius, the Athenians gave the name of muſic to all the arts; and all this is no longer aſtoniſhing, ſince, that a modern muſician has found in muſic the principal of all references, and the foundation of every ſcience. From thence are all thoſe ſublime pieces of muſic, which the philoſophers have handed down to us, divine muſic, muſic of mankind, celeſtial muſic, terreſtrial, active, contemplative, enunciative, intellective, oratorical, &c.

It is under theſe vaſt ideas that we muſt underſtand ſeveral paſſages of the ancients on muſic, which would be unintelligible in the ſenſe which we at preſent give to this word.

It appears that muſic has been one of the firſt arts; we find it mixt among the moſt ancient monuments of human kind. It is alſo very probable, that the vocal muſic was found before the inſtrumental, if among the ancients there ever was a muſic truly inſtrumental; i. e. formed for inſtruments entirely. Not only mankind, before diſcovering any inſtrument, muſt have made obſervations on the different tones of their voice, but they muſt have learned very early, by the natural concert of birds, to modify their voice and throat in an agreeable and melodious manner. After this, the wind inſtruments muſt have been the firſt invented. Diodorus, and other authors, attribute the invention

to

to an obſervation of the blowing of the wind in reeds or other hollow plants. This is alſo a ſentiment of Lucretius.

At liquidas avium voces imitarier ore
Antè fuit multò, quam levia Carmina cantu
Concelebrare homines poſſint, aureiſque juvari;
Et Zephyri cava per calamorum ſibila primùm
Agreſteis docuêre cavas inflare cicutas.

In regard to other kinds of inſtruments, the ſonorous chords are ſo common, that mankind muſt have early obſerved the different tones which have given birth to the different chord inſtruments. (Vide Chord.)

Thoſe inſtruments which are ſtruck to draw a ſound from them, as drums and tymbals, owe their origin to the deafening noiſe which hollow bodies emit when ſtruck.

It is difficult to leave theſe generalities to fix on ſome certainty on the invention of muſic reduced into an art. Without aſcending to times before the flood, ſeveral of the ancients attribute this invention to Mercury, as well as that of the lyre. Others fix on Cadmus as the introductor of it among the Greeks, who, flying from the court of the king of Phænicia, carried with him into Greece, the muſician, Hermione, or Harmony; from whence it would follow, that this art was known in Phænicia before Cadmus. In a part of Plutarch's Dialogue on Muſic, Lyſias names Amphion as the inventor; in another, Soterichus ſays it was Apollo; and in a third, he ſeems to give the honour to Olympus: there is no agreement on this matter, and, it muſt be confeſſed, it is of little conſequence. To theſe firſt inventors ſucceeded Chiron, Demodocus, Hermes, Orpheus, who, in the opinion of ſome, invented the lyre.

After thoſe, came Phæmius, then Terpander, contemporary of Lycurgus, and who laid down the rules of muſic. Some attribute to him the invention of the firſt modes. Laſtly, we add Thales and Thamiris, who is ſaid to have been the inventor of muſical inſtruments. Theſe great muſicians lived moſt of them before Homer. Others, more modern, are Laſus of Hermione, Melnippipes, Philoxenes, Timotheus, Phrynnis, Epigonius, Lyſander, Simmicus, and Diodorus, who all have conſiderably improved the muſic.

Laſus is, as it is reported, the firſt who has written on this art, in the time of Darius Hyſtaſpes. Epigonius invented the inſtrument of forty chords, which bore his name. Simmicus invented alſo an inſtrument of thirty-five chords, called Simicium.

Diodorus improved the flute, and added new holes to it; and Timotheus the lyre, by adding a new chord to it, which was the occaſion of his ſuffering a fine by the Lacædemonians.

As

As the ancient authors expreſs themſelves very obſcurely on the inventors of muſical inſtruments, they are alſo very unintelligible on the inſtruments themſelves. Hardly do we know any thing more of them than their names. (Vide Inſtrument.)

Muſic was in its greateſt eſteem among the different people of antiquity, and particularly among the Greeks; and this eſteem was proportionate to the power and ſurpriſing effects which they attributed to this art. Their authors do not think they have given us a too great idea of it, when they told us it was uſed in heaven; and that it formed the chief amuſement of the gods and ſouls of the bleſſed. Plato does not heſitate to ſay, that there can be no change in muſic, but there muſt be one alſo in the conſtitution of the ſtate; and he pretends, that ſounds may be aſſigned capable of raiſing the ideas of a baſe ſoul, inſolence, &c. with all their contrary virtues. Ariſtotle, who ſeems to have written his political works only to oppoſe his ſentiments to thoſe of Plato, is, however, in concord with him in regard to the power of muſic over the manners. The judicious Polybius tells us, that muſic was neceſſary to ſweeten the manners of the Arcadians, who dwelt in a country where the air was cold and wintry; that thoſe of Cynetes who neglected muſic, ſurpaſſed all the Greeks in cruelty, and that there was no country which was equal to it in crimes. Athenæus aſſures us, that in former times, all laws, human and divine, exhortations to virtue, the knowledge of what concerned the gods and heroes, the lives and actions of illuſtrious men, were written in verſe, and ſung publicly in choirs by the ſound of inſtruments; and we ſee, by ſacred writings, that ſuch were the cuſtoms of the Iſraelites from the earlieſt times. There had been no method found more efficacious to engrave, on the minds of men, the principles of morality and love of virtue; or, rather, all this was not the effect of a premeditated deſign, but of the grandeur in its ſentiments, and the elevation of the ideas which ſought, by proportioned accents, to form to themſelves a language worthy of them.

Muſic formed a part of the ſtudy of the ancient Pythagoreans. They uſed it to excite the ſoul to laudable actions, and to inflame each other with the love of virtue. According to the philoſophers, our ſouls were formed of nothing but harmony; and they expected to re-eſtabliſh, by the means of ſenſual harmony, the intellectual and primitive one of the faculties of the ſoul; that is to ſay, that which, according to them, exiſted in it before it animated our bodies, and whilſt it dwelt in heaven.

Muſic is at preſent ſunk from that degree of power and majeſty, to far as to make us doubt of the truth of thoſe wonders which it formerly performed, tho' atteſted by the moſt judicious

hiſtorians, and graveſt philoſophers of antiquity. However, in modern hiſtory, we may find ſome ſimilar facts. If Timotheus excited the fury of Alexander by the phrygian mode, and calmed it by the lydian, a muſic, ſtill more moderate, has ſurpaſſed it, by exciting, they ſay, in Erric, king of Denmark, ſuch a fury, that he kill'd his moſt faithful ſervants. Doubtleſs theſe wretches were leſs ſenſible of muſic than their prince, otherwiſe he might have run half the danger. D'Aubigny recounts another hiſtory quite ſimilar to that of Timotheus. He tells us, that in the reign of Henry III. the muſician Claudin, playing at the marriage of the Duc de Joyeuſe, in the phrygian mode, animated, not the king, but a courtier, who ſo far forgot himſelf as to draw his ſword in the preſence of his ſovereign; but the muſician quickly calmed him by taking the hypo-phrygian mode. This is ſaid with as much aſſurance, as if the muſician Claudin knew in what conſiſted the phrygian and hypo-prhygian modes.

If our muſic has little power over the affections of the ſoul, in return, it is capable of acting phyſically on the body, as in the hiſtory of the Tarantula, too well known to want mentioning here: as a proof of which, I bring the Chevalier Gaſcon which Boyle mentions, who, at the ſound of a cornemuſe, or bag-pipe, could not contain his urine; to which ſhould be added, what the ſame author recounts of ſome women, who burſt into tears at the hearing of a certain tone, with which the reſt of the audience were not at all affected; and I know a woman of faſhion at Paris, who cannot liſten to any kind of muſic whatſoever, without being ſeized with an involuntary and convulſive laughter. We read alſo in the hiſtory of the Academy of Sciences, at Paris, that a muſician was cured of a violent fever, by a concert performed in his chamber.

Sounds act even on inanimated bodies, as we may ſee by the ſhaking and reſonance of a ſonorous body at the ſound of another, with which it is connected in ſome reſpect. Morhoff mentions a certain Peter, a Dutchman, who broke a glaſs by the ſound of a voice. Kirtcher ſpeaks of a large ſtone, which trembled at the ſound of a certain pipe in an organ. P. Merſenne ſpeaks alſo of a kind of waggon, which the playing of the organ ſhook as though it had been an earthquake.

Boyle adds, that the *Stalls* often ſhake at the ſound of the organ, and that he has himſelf felt them tremble under his hand at the ſound of the organ or the voice, and that he has been aſſured, that thoſe which were well formed, trembled all at ſome determined tone. The whole world have heard mention of the famous pillar at the church in Rheims, which ſenſibly ſhakes at the ſound of a certain bell, whilſt the other pillars continue immoveable;

moveable: but that which tranſmits the honour of the marvellous to the ſound, is, that this ſame pillar equally ſhakes when the clapper of the bell is removed.

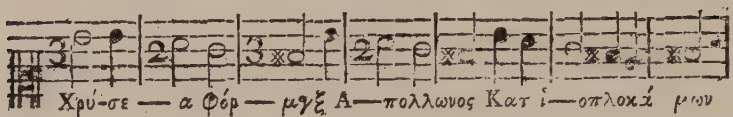
All theſe examples, the greateſt part of which belong rather to the ſound than to the muſic, and of which phyſic may give ſome explanation, neither makes them more credible or intelligible to us, tho' the ancients held them in muſic as marvellous and almoſt divine. Many authors have puzzled their brains to endeavour to give a cauſe for them. Wallis attributes them partly to the novelty of art, and partly rejects them on the exaggeration of authors.

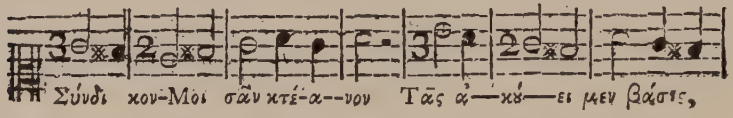
Others imagine that the Greeks, more ſenſible than ourſelves, by the conſtitution of their climate, or by their method of living, might be mov'd by things which could make no impreſſion on us. Monſ. Burette, even in adopting all theſe facts, pretends, that they do not prove the perfection of the muſic which produced them: he ſees nothing in it, but what the ſad ſcrapers of a country village might have done, in his opinion, quite as well as the firſt muſicians of the world.

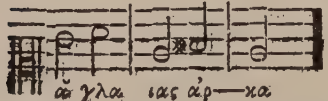
The generality of theſe ſentiments are founded on the perſuaſion we are in of the excellence of our muſic, and the contempt we have for that of the ancients. But is this contempt as juſtly founded as we pretend? This has been ſeveral times examined; and when we conſider the obſcurity of the matter, and the inſufficiency of judges, has great need of undergoing a better ſearch. Of all thoſe who have yet employed themſelves in this examination, Voſſius, in his Treatiſe de Viribus Cantûs & Rhythmi, appears to have beſt diſcuſſed the queſtion, and draws the neareſt to truth. I have thrown ſome ideas thereon in a writing not yet made public, where my thoughts will be more ſuitably placed than in this work, which is not intended to ſtop the reader for the diſcuſſion of my opinion.

It has been much wiſhed to ſee ſome fragments of ancient muſic. P. Kircher and Monſ. Burette have laboured thereon to ſatisfy the curioſity of the public. To give them a greater chance of profiting by their labours, I have tranſcribed here two pieces of Greek muſic, turn'd into modern notes by thoſe authors.

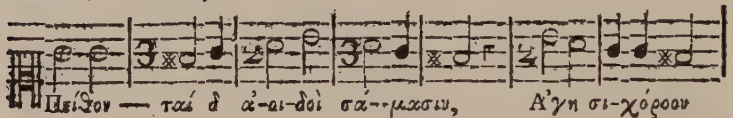
*An Ode of Pindar. A Piece of ancient Muſic.*

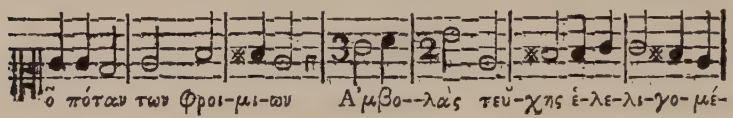


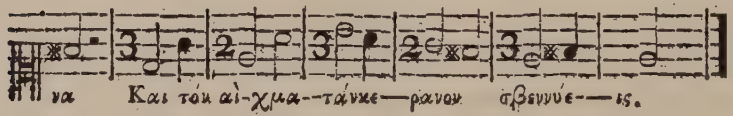



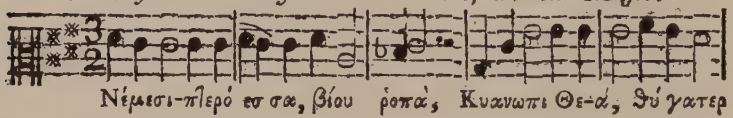

*The Chorus which follows is ſung with ſound of the Harp.*

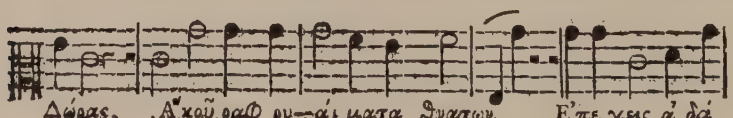


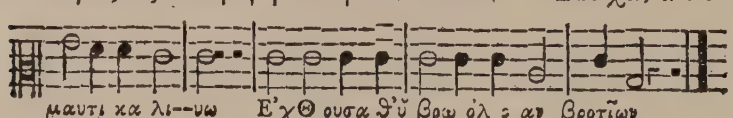




*An Hymn to Nemeſis zd. a Piece of ancient Muſic.*



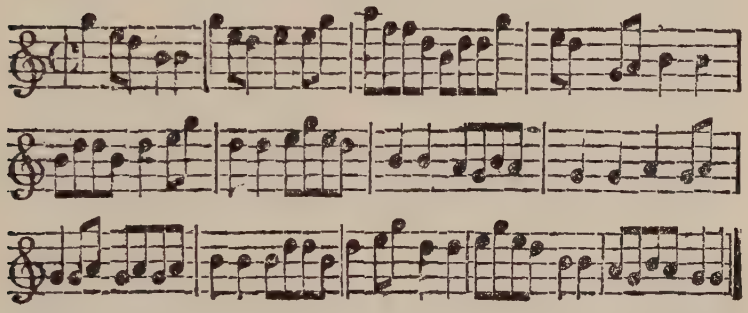



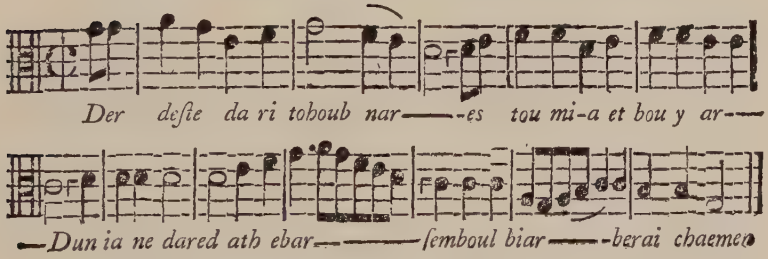

But who can dare to judge of ancient muſic by ſuch examples? I imagine them to be faithful. I even wiſh that thoſe who would judge of it, could ſufficiently know the genius and accent of the Greek,

Greek, that they would reflect, that an Italian is judged incapable of a French air; that a Frenchman knows nothing of the Italian melody: when he has compared time and place, then let him ſpeak if he dare.

To put the reader in a way to judge of the different muſical accents of different people, I have tranſcribed alſo a Chineſe air, drawn from P. du Halde.

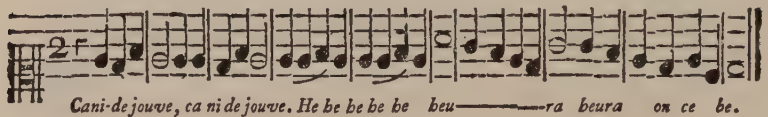
A Chineſe Air.



A Perſian Air, taken from the Chevalier Chardin.

Tranſlation of the Perſian Words.

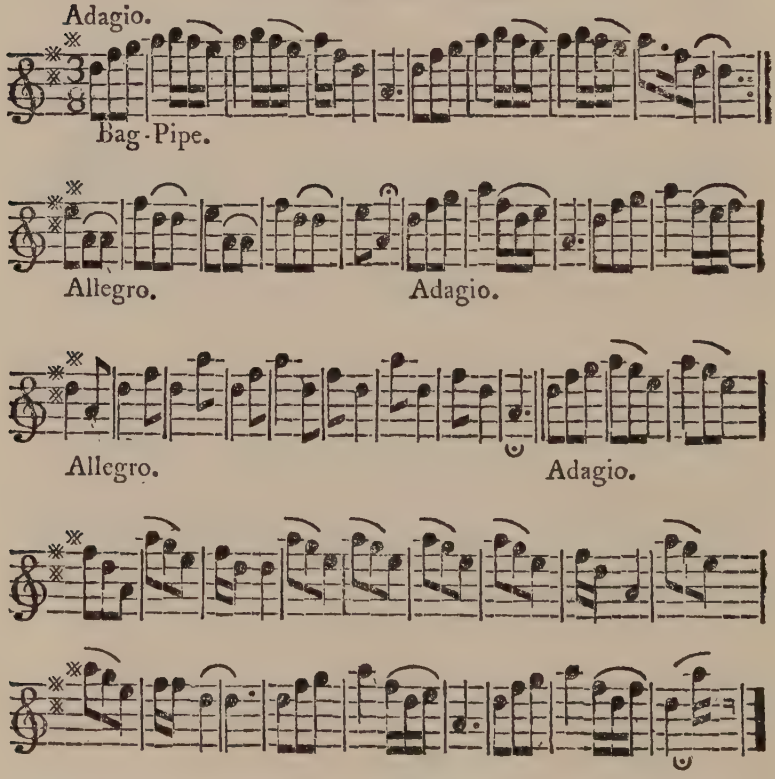
Your countenance is vermilion, like the flowers of Granada;
Your words a perfume, from which I am inſeparable.
The world has nothing fix'd: Every thing changes.
Bring odorous flowers to animate the heart of my monarch.

Song of the Savages in Canada, drawn from P. Merſonne.




We ſhall find in theſe pieces a conformity of modulation with our muſic, which muſt make one admire the excellence and univerſality of our rules, and may render the underſtanding or fidelity of thoſe who have tranſmitted to us thoſe airs, ſomewhat ſuſpicious to others.

The Ranz des Vaches.




The above celebrated Air, called Ranz des Vaches, was ſo generally beloved among the Swiſs, that it was forbidden to be play'd in their troops under pain of death, becauſe it made them burſt

burſt into tears, deſert, or die, whoever heard it; ſo great a deſire did it excite in them of returning to their country. We ſhall ſeek in vain to find in this air any energic accents capable of producing ſuch aſtoniſhing effects. Theſe effects, which are void in regard to ſtrangers, come alone from cuſtom, reflections, and a thouſand circumſtances, which, retrac'd by thoſe who hear them, and recalling the idea of their country, their former pleaſures, their youth, and all their joys of life, excite in them a bitter ſorrow for the loſs of them. The muſic does not in this caſe act preciſely as muſic, but as a memorative ſign. This air, tho' it continues the ſame, does not produce, at preſent, the ſame effects which it produc'd before amongſt the Swiſs; becauſe, having loſt the taſte for their ancient ſimplicity, they no longer regret it, but when reminded. So true it is, that it is not in their phyſical action, we ſhould ſeek for the greateſt effects of ſounds on the human heart.

The method, by which the ancients prick'd their notes, was eſtabliſhed on a very ſimple foundation, which was the connection of cyphers; i. e. by the letters of their alphabet; but inſtead of confining themſelves on this idea to a ſmall number of characters eaſy to retain, they were loſt in multitudes of different ſigns, with which they confuſed their muſic in return, ſo that they had as many methods of marking as genera and modes. Boetius took from the Latin alphabet characters correſponding to thoſe of the Greek. Pope Gregory perfected this method. In 1024, Gui d'Arezzo, benedictine, introduced the uſe of ſtave, (vide Stave) on lines, on which he marked the notes in form of points, (vide Notes) expreſſing, by their poſition, the elevation or the lowering of the voice. Kircher, however, pretends, that this invention was prior to Gui, and, in effect, I have not ſeen in the writings of this monk, that he claims it to himſelf; but he invented the gamut, and applied to the notes of his hexachord, names drawn from the hymn of St. John Baptiſt, which they preſerve at preſent. This man, laſtly, born for muſic, invented different inſtruments, called polyplectra, ſuch as the harpſichord, ſpinnet, viol, &c. &c.

The characters of muſic, have, according to the general opinion, received their laſt conſiderable augmentation in 1330, at the time, they ſay, when Jean de Muris, call'd improperly by ſome Jean de Mæurs, or de Muria, doctor of Paris, tho' Geſner makes him an Engliſhman, invented the different figures of the notes which expreſs the duration or the quantity, and which we now call ſemi-breves, minums, crotchets, &c. But this ſentiment, tho' very common, appears to me rather dubious, to judge of it by his Treatiſe of Muſic, intitled Speculum Muſicæ, which I

have had the boldneſs to read almoſt all through, to conſtitute therein the invention attributed to this author. As to the remainder, this great muſician has had, like the king of poets, the honour to be claimed by different people; for the Italians alſo pretend he is of their nation, perhaps deceived by a fraud or error of Bontempi, who calls him Penigino inſtead of Panigino.

Laſus is, or ſeems to be, as I have ſaid before, the firſt who has written on muſic; but his works are loſt, as well as ſeveral other books of the Greeks and Romans on the ſame ſubject. Ariſtoxenes, the diſciple of Ariſtotle, and chief of the muſical ſect, is the moſt ancient author who remains to us in that ſcience. After him comes Euclid of Alexandria. Ariſtides Quintilian wrote after Cicero. Alypius comes next; then Gaudentius, Nicomachus, and Bacchius.

Marc Meibomius has given us a beautiful edition of theſe ſeven Greek authors, with a Latin tranſlation and notes.

Plutarch has written a Dialogue on Muſic. Ptolomy, a celebrated mathematician, wrote, in Greek, the Principles of Harmony, about the time of the emperor Antoninus. This author preſerves a medium between the Pythagoreans and Ariſtoxeneans. A long time after, Manuel Bryennius wrote alſo on the ſame ſubject. Amongſt the Latins, Boetius has written in the time of Theodoric; and not far from the ſame time, Martianus, Caſſiodorus, and Saint Auguſtine.

The moderns are many in number. The moſt known are Zarlin, Salerias, Valgulio, Galilée, Mei, Doni, Kircher, Merſenne, Parran, Perrault, Wallis, Deſcartes, Holder, Mengoli, Malcolm, Burette, Valloti: laſtly, Monſ. Tartini, whoſe book is full of profundity, genius, tautology, and obſcurity; and Monſ. Rameau, whoſe writings have this ſingularity, that they have gain'd him a great fortune without having ever been read by any one. This lecture is beſides become abſolutely ſuperfluous, ſince, that M. d'Alembert has taken the trouble of explaining to the public the ſyſtem of the fundamental baſs, the only thing uſeful and intelligible which can be met with in the writings of this muſician.

MUSIC MASTER. A muſician hir'd to compoſe and execute muſic. It is the muſic-maſter who beats time, and directs the muſicians. He ſhould be ſkill'd in compoſition, tho' he does not always compoſe the muſic which he makes others execute. In the opera-houſe of Paris, for inſtance, the employment of beating time is a particular office; whereas, the muſic of the opera is compoſed by whomſoever has talent and will. In Italy, he who has compoſed an opera directs always its execution, not in beating time, but with the harpſichord. Wherefore, the office of muſic-maſter

muſic-maſter has no foundation but in churches: for which reaſon, we do not ſay in Italy *Muſic-Maſter*, but *Maſter of the Chapel*, a denomination which begins to be uſed at preſent in France.

MUTATIONS. By this term were call'd, in ancient muſic, generally, all the paſſages of an order, or ſubject of one air to another.

Ariſtoxenes defines the mutation as a kind of paſſion in the order of melody; Bacchius, as a change in the ſubject, or the tranſpoſition of a like into an unlike place; Ariſtides Quintilian, as a variation in the propoſed ſyſtem, and the character of the voice; Martianus Capella, as a tranſition of the voice in another order of ſounds.

All theſe definitions, obſcure and too general, have need of being cleared by diviſions, but authors do not agree better on theſe diviſions than on the definition itſelf. However, we juſt gather, that all theſe mutations may be reduced to five principal kinds.

Firſt, A mutation in the genus, when the air paſs'd, for inſtance, from diatonic to chromatic, or to the enharmonic, and reciprocally.

Secondly, In the ſyſtem, when the modulation united two diſjoint tetrachords, or ſeparated from them two conjoint, which anſwers to the paſſage of the B ſharp to B flat, and reciprocally.

Thirdly, In the mode, when, for inſtance, we paſs from the doric to the phrygian or lydian, and reciprocally, &c.

Fourthly, In the rhyme, when we paſs'd from quick to ſlow, or from one meaſure to another.

Fifthly and laſtly, in the melopœa, when we interrupted a heavy, ſerious, magnificent air, by a lively, gay, and quick change, &c.

---

# N.

NATURAL. This word has ſeveral ſenſes in muſic. Firſt, Natural muſic is that which the human voice forms by oppoſition, to the artificial muſic which is executed with inſtruments. Secondly, We ſay that an air is natural when it is eaſy, ſweet, pleaſing; that a harmony is natural, when it has few variations or diſſonances, that it is produced by chords eſſential and natural to the mode. Thirdly, Natural is alſo ſaid of every

piece of muſic which is neither forced or obſcure, which neither goes too high or too low, neither too quick or too ſlow. Fourthly and laſtly, The moſt common ſignification, and the only one which the Abbe Bropard has not mentioned, is applied to the tones or modes, from whence the ſounds are drawn in the ordinary gamut without any alteration, ſo that a natural mode is that in which neither dieſis or B flat is uſed. In the exact ſenſe, there could be only one natural tone, which would be that of ut, or C major third; but we extend the naturals to all the tones, whoſe eſſential chords, bearing neither dieſis's or B's flat, permit that we ſhould number the cleff neither with one or the other: ſuch are the major modes of G and F, the minor modes of A and D, &c. (Vide Tranſpoſed Cleffs, Modes, &c.)

The Italians always mark their recitative to the natural, the changes of tone being ſo frequent therein, and the modulations ſo confined, that, whatever way we number the cleff for a mode, we could not ſpare either dieſis's or B's flat for the reſt, and we ſhould throw ourſelves, in the end of the modulation, in very embaraſſing confuſions of ſigns, when the notes changed in the cleff, by a ſign, are found changed by the contrary ſign accidentally.

To ſol fa in natural, is to ſol fa by the natural. (Vide Recitative) Names of the ſounds in the ordinary gamut, without regard to the tone which we are in.

NETE. This was, in the Greek muſic, the fourth chord, or ſharpeſt of each of the three tetrachords, which followed the two firſt from flat to ſharp.

When the third tetrachord was conjoint with the ſecond, this was the tetrachord ſynnemenon, and its nete was called nete ſynnemenon.

This third tetrachord bore the name of diezeugmenon when it was disjoint, or ſeparated from the ſecond by the interval of a tone, and its nete was called nete diezeugmenon.

Laſtly, The fourth tetrachord, always bearing the name of hyperboleon, its nete was always called alſo nete hyperboleon.

In regard to the two firſt tetrachords, as they were always conjoint, they had no nete, either of them; the fourth chord of the firſt, being always the firſt of the ſecond, was called hypate meſon; and the fourth chord of the ſecond, forming the middle of the ſyſtem, was called meſis. *Nete*, ſays Boetius, *quaſi neate, id eſt, inferior*, for the ancients, in their diagrams, placed the flat ſounds above, and the ſharp below.

NETOIDES. Sharp ſounds. (Vide Lepſis.)

NEUME. A term in church-muſic. The neume is a kind of ſhort recapitulation of the air in a mode, which is made at the end of an ancient, by a ſimple variety of ſounds, and without joining

joining to them any words. The Catholics authorize this ſingular cuſtom on a paſſage of St. Auguſtine, who ſays, that no words being poſſible to be worthy of pleaſing God, it is laudable to addreſs him in a confuſed muſic of jubilation. "For to whom is "ſuch a jubilation ſuitable, unleſs to an ineffable Being? and "how can we celebrate this ineffable Being, ſince we cannot be "ſilent, or find any thing in our tranſports which can expreſs "them, unleſs unarticulated ſounds?"

NIGLARIAN. The name of a nome, or air of an effeminate and ſoft melody, as Ariſtophanes reproaches Philoxenes its author.

NIMBLY. This word expreſſes a movement ſtill quicker than gay, a movement which is a medium between gay and quick. It anſwers nearly to the Italian term vivace.

NINETEENTH. An interval which comprehends eighteen conjoint degrees, and, conſequently, nineteen ſounds of the diatonic, reckoning the two extremes. This is the double octave of the fifth. (Vide Fifth)

NINTH. The octave of the ſecond. This interval has the name of ninth, becauſe we muſt form nine conſecutive ſounds to arrive diatonically from one of its terms to the other. The ninth is major or minor, as the ſecond, of which it is the replique. (Vide Second)

There is a concord by ſuppoſition, which is called concord of the ninth, to diſtinguiſh it from the concord of the ſecond, which is prepared, accompanied and prevented differently. The concord of the ninth is formed, by a ſound placed in the baſs, a third below the concord of ſeventh, which is the occaſion of the ſeventh itſelf making a ninth on this new ſound. The ninth is accompanied, conſequently, by the third, the fifth, and ſometimes the ſeventh. The fourth note of the tone is generally that on which this concord is moſt ſuitable, but it may be placed every where in harmonic unions. The baſs ought always to arrive by aſcending to the note which bears the ninth. The part which forms the ninth ought to ſyncopate, and prevents this ninth as a ſeventh, deſcending diatonically from one degree on the octave, if the baſs continues in its place, or on the third, if the baſs deſcends from the third. (Vide Concord, Suppoſition, Syncope)

In the minor mode, the ſenſible concord on the mediant loſes the name of concord, and takes that of ſuperfluous fifth. (Vide Superfluous Fifth)

NOELS, or CHRISTMAS CAROLS. Kinds of airs allotted to certain cantics, ſung by the people in the celebration of Chriſtmas. The airs of theſe carols ſhould have a rural and paſtoral character, ſuitable to the ſimplicity of the words, and to that of

the ſhepherds, who, we ſuppoſe, ſung them at going to pay homage to the infant Jeſus in the manger.

NOME. Every air determined by rules which it was not permitted to break, bore amongſt the Greeks the name of nome.

The nomes received their denominations, firſt, either from certain people, æolian nome, lydian nome; ſecondly, or from the nature of the rhyme, orthian nome, dactylic nome, trochaïc nome; or thirdly, from their inventors, Hieracian nome, Polymneſtant nome; fourthly, or from their ſubjects, pythian nome, comic nome; fifthly or laſtly, from their mode, hypatoïd or flat nome, netoïd or ſharp nome, &c.

There were two-part nomes which were ſung on two modes. There was alſo a nome called three parts, which was ſung on three modes. viz. the doric, the phrygian, and the lydian. (Vide Song, Mode)

NOMIC. The nomic nome, or the genus of the muſical ſtyle which bore this name, was conſecrated, among the Greeks, to Apollo, god of ſongs and verſes, and wherein they endeavoured to render the airs brilliant, and worthy of the god to whom they were conſecrated. (Vide Mode, Melopœa, Style.)

NOMION. A kind of love ſong amongſt the Greeks. (Vide Song)

NOTES. Signs or characters uſed to mark, that is, to write the muſic.

The Greeks made uſe of the letters of their alphabet to mark their muſic. Moreover, as they had twenty-four letters, and as their greateſt ſyſtem, which was only of two octaves in a ſame mode, did not exceed the number of ſixteen ſounds, it would ſeem that the alphabet muſt have been more than ſufficient to expreſs them, ſince their muſic, being only their poetry marked, the rhyme was ſufficiently determined by the metre, without there being wanting for that abſolute powers, and ſigns peculiar to muſic; for tho' by ſuperabundance they had characters alſo to mark the different feet, it is certain, that vocal muſic was not in want of it; and inſtrumental muſic, being only the vocal play'd by inſtruments, had neither need of it, ſince the words were written, or the ſymphoniſt knew them by heart.

But we muſt take notice, in the firſt place, that two ſame ſounds, one while at the extremity, and another while in the middle of the third tetrachord, according to the place wherein the disjunction is made, (Vide that word) they gave to each of thoſe ſounds, names and ſigns which expreſſed theſe different ſituations. Secondly, that theſe ſixteen ſounds were not all the ſame in the three genera; that there were ſome common to the three, and others peculiar to each; and that notes were conſe-

quently

quently neceſſary to expreſs theſe differences. Thirdly, that muſic was differently noted for inſtruments than for the voice, as we have at preſent, for certain chord inſtruments, a table which has no reſemblance to that of ordinary muſic in the leaſt. Laſtly, that the ancients having as many as fifteen different modes, according to the number given by Alypius, (Vide Mode) it was neceſſary to appropriate characters to each mode, as we ſee in the tables of the ſame author. All theſe modifications required a multitude of ſigns, for which the four and twenty letters were very far from ſufficing. From thence ariſes the neceſſity of uſing the ſame letters for ſeveral ſorts of notes, which obliged them to give to thoſe letters different ſituations to couple them, maim them, and lengthen them in different ſenſes. For inſtance, the letter Pi written in all theſe forms Π, Ⲡ, ⲡ, Ⲡ, Ⲡ, expreſſed five different notes.

By combining all the modifications which theſe different circumſtances required, we find nearly 1620 different notes, a prodigious number, which muſt have rendered the ſtudy of muſic a thing of the greateſt difficulty. It was certainly ſo in the time of Plato, who adviſes young men to ſpend two or three years in ſtudying its rudiments only. The Greeks, however, had not ſo great a number of characters, but the ſame note had ſometimes different ſignifications, according to occaſion; wherefore, the ſame character which marks the proſlambanomenos of the lydian mode, marks the parhypate meſon of the hypo-iaſtian mode, the hypate meſon of the hypo-phrygian, the lichanos hypaton of the hypo-lydian, the parhypate hypaton of the iaſtian, and the hypate hypaton of the phrygian. The note changes alſo ſometimes, tho' the ſound continues the ſame; as, for inſtance, the proſlambanomenos of the hypo-phrygian, which has the ſame ſign in the hyper-phrygian, hyper-dorian, phrygian, dorian, hypo-phrygian, and hypo-dorian modes, and another ſame ſign, in the lydian and hypo-lydian modes.

# Notes of the Ancient Greek Muſic,

## Diatonic Genus, Lydian Mode.

N. B. The firſt Note is for Vocal Muſic, the Second, for the Inſtrumental.

| Modern Names. | Ancient Names. | Notes. | | Explanation. |
|---|---|---|---|---|
| La | Proſlambanomenos | Z | Ⅎ | Zeta imperfect, and Tau couchant |
| Si | Hypaté hypaton | Γ | Γ | Gamma backwards, and Gamma juſt. |
| Ut | Parhypaté Hypaton | R | L | Beta imperfect, and Gamma varied. |
| Re | Hypaton Diatonos | Φ | F | Phi, and Digamma. |
| Mi | Hypaté meſon | C | C | Sigma, and Sigma. |
| Fa | Parhypaté meſon | P | C | Rho, and Sigma couchant. |
| Sol | Meſon Diatonos | M | ⅂ | Mu, and Pi prolong'd. |
| La | Meſis | I | ⅄ | Iota, and Lambda couchant. |
| Si b | Trité Synnemenon | Θ | V | Theta, and Lambda varied. |
| Si ♮ | Parameſis | Z | ⊓ | Zeta, and Pi couchant. |
| ※ Ut | Synnemenon Diatonos | Γ | N | Gamma, and Nu. |
| + Re | Neté Synnemenon | ʊ | Z | Omega varied, and Zeta. |
| ※ Ut | Trité Diezeugmenon | E | ⅄ | Eta and Pi varied, and prolong'd. |
| + Re | Diezeugmenon Diatonos | comme la | | Neté Synnemenon, which is the ſame chord. |
| Mi | Neté Diezeugmenon | ⊕ | ⋔ | Phi couchant, and Eta courant prolong'd. |
| Fa | Trité hyperboleon | ɣ | ɣ | Upſilon varied, and Alpha with the right ſtroke cut off. |
| Sol | Hyperboleon Diatonos | M | ⅂ | Mu, and Pi prolong'd, top'd with an accent. |
| La | Neté hyperboleon | I | ⅄ | Iota, and Lambda couchant, top'd with an accent. |

REMARKS.

## REMARKS.

Tho' the chord diatonos of the tetrachord ſynnemenon, and the trité of the tetrachord diezeugmenon, have different notes, they are only the ſame chord, or two chords in uniſon. It is the ſame thing with the two chords, neté ſynnemenon and diezeugmenon diatonos; theſe two alſo have the ſame chords. We muſt alſo take notice, that the meſis and nete hyperboleon bear the ſame note for the vocal, tho' they are in the octave of each other: It is apparent, that in practice there was ſome other method of diſtinguiſhing them in muſic.

The curious, who would wiſh to know the notes of all the genera and modes, may conſult, in Meibomius, the tables of Alypius and Bacchius.

We here find the table of notes in the diatonic genus in the lydian mode, which was the moſt uſed; theſe notes having been preferred to thoſe of the other modes by Bacchius, are ſufficient to underſtand all the examples which he gives in his work; and the muſic of the Greeks being no longer in uſe, this table ſuffices alſo to put an end to the errors of the public, who think their manner of marking notes ſo entirely loſt, that this muſic would be impoſſible for us to decypher. We might decypher it as exactly as the Greeks themſelves could have done, but to phraſe it, to accent it, to underſtand it, to judge of it, is poſſible to no one, and never can become ſo. In every kind of muſic, as well as in every language, to decypher, and to read, are two things very different. The Latins, who, in imitation of the Greeks, marked alſo their muſic with the letters of their alphabet, removed alſo a great quantity of their notes, the enharmonic genus having ceaſed its practice entirely, and ſeveral modes being no longer in uſe. It appears that Boetius eſtabliſhed the uſe of fifteen letters only; and Gregory, biſhop of Rome, conſidering that the connections of the ſounds are the ſame in each octave, reduced theſe fifteen notes alſo to the ſeven firſt letters of the alphabet, which were repeated in different forms from one octave to another.

Laſtly, In the eleventh age, a benedictine of Arezzo, named Gui, ſubſtituted, in the place of theſe letters, points placed on different parallel lines, to each of which a letter ſerved as cleff. In the end, theſe points were enlarged; it was alſo thought convenient to place ſome in the ſpaces compriſed between theſe lines, and theſe lines and ſpaces were multiplied as occaſion required. (Vide Stave)

The

The notes had for ſome time no other uſe than to mark the degrees and differences of intonation. They were all, in regard to duration, of equal powers; and received, in regard to this, no other difference than thoſe of long and ſhort ſyllables, on which they were ſung: It is nearly in this condition that the church-muſic the Catholics has continued to this day; and the muſic of the pſalms, amongſt the proteſtants, is ſtill more imperfect; ſince, in their uſe, the lengths of the brevis, or the rounds of the minums, were not even diſtinguiſhed, tho' they preſerved two different figures.

This indiſtinction of figures continued in the general opinion, as far as 1338, when Jean de Muris, a doctor and canon of Paris, gave, it is pretended, different figures to the notes, to mark the connections of duration which they had between each other: he alſo invented certain ſigns of meaſure, called modes or prolations, to determine, in the courſe of an air, if the reference of long to ſhort ſhould be double or triple, &c. Many of the figures no longer ſubſiſt. There have been others ſubſtituted in their place at different times. (Vide Meaſure, Time, Power of Notes.) Vide alſo, at the word Muſic, what I have ſaid of this opinion.

To read muſic written by notes, and to render it exactly, there are eight things to be conſidered. Firſt, the cleff and its poſition. Secondly, the dieſis's or B's flat which may accompany it. Thirdly, the place or poſition of each note. Fourthly, its interval, that is, its connection with that which precedes, or with the tonic, or ſome fixed note whoſe tone we have. Fifthly, its figure, which determines its powers. Sixthly, the time wherein it is found, and the place it occupies. Seventhly, the dieſis B flat, or accidental B ſharp, which may precede it. Eighthly, the kind of the meaſure, and character of the movement. And all this, without reckoning either the words or ſyllables to which each note belongs, the accent, or the expreſſion ſuitable to the ſentiment, whereon we reflect. One of theſe eight obſervations only omitted, may make it jar, or play out of time.

The muſic has had the lot of thoſe arts which improve but ſlowly.

The inventors of notes have been attentive to the ſtate only, wherein it was in their time, without reflecting on that to which it might be raiſed; and in the end, their marks have been found ſo much the more defective, as the art has been ſince improved. In proportion as they advanced, they eſtabliſhed new rules to remedy the preſent inconveniencies; by multiplying the ſigns, they have multiplied the difficulties; and by dint of additions and cyphers, they have drawn, from a ſimple principle, a ſyſtem very confuſed, and very badly regulated.

We

We may reduce its faults to three principals: The firſt is the multitude of ſigns and their combinations, which load the mind and memory of beginners in ſuch a manner, that the ear is form'd, and the organs have acquired habit, and a neceſſary facility, a long time before they are able to ſing *á livre ouvert*; from whence it follows, that the difficulty is intirely in an attention to the rules, and not at all in the execution of the air. The ſecond, is the little evidence in the nature of major, minor, diminiſhed, and ſuperfluous intervals, all indiſtinctly confounded in the ſame poſitions; a fault of ſuch influence, that it is not only the principal cauſe of the ſlowneſs in the progreſs of ſcholars, but, moreover, there is no muſician form'd, who can fail of being incommoded in the execution. The third, is the extreme diffuſion of the characters, and the too great extent which they take up, which, join'd to thoſe lines, to thoſe ſtaves ſo inconvenient to trace, becomes a ſource of embarraſſment of more than one kind. If the firſt advantage of inſtituting ſigns, was, that they ſhould be clear, the ſecond is, that they ſhould become conciſe; what judgment then we form of an order of ſigns in which both the one and the other are wanting?

Muſicians, it is true, cannot ſee any thing of this. Cuſtom has habituated them to this. Muſic to them is not the knowledge of ſounds; it is that of crotchets, minums, demi-crotchets, &c. &c. As ſoon as theſe figures ceaſe to be preſent, they cannot ſatisfy themſelves that they ſee muſic. Moreover, what they have learnt with difficulty, how can they render it eaſy to others? It is not then the muſician who ſhould be conſulted herein, but the man who *underſtands* muſic, and who has reflected on the art.

There are not, in this laſt claſs, two that agree in the errors of our notes; but ſtill theſe faults are eaſier to know than to correct. Many have endeavoured at this correction without ſucceſs for ſome time. The public, without any great diſcuſſion on the advantage of the ſigns propoſed to it, always embrace thoſe which are already eſtabliſhed, and muſt always prefer a bad method of knowing, to a better of learning. Wherefore, becauſe a new ſyſtem is rejected, is no ſolid proof of any thing more, than that the author came too late; and we may always diſcuſs and compare the two ſyſtems, with any regard on this point, to the judgment of the public.

All the methods of marking notes, which have not had for their grand law the evidence of intervals, do not ſeem to me worthy of the trouble of being removed. I will not then make any ſtop at that of Monſ. Sauveur, which may be ſeen in the Memoirs of the Academy of Sciences, anno 1721, nor at that of

Monſ. Demaux, given ſome years after. In theſe two ſyſtems, the intervals being expreſſed by ſigns intirely arbitrary, and without any true connection with the thing repreſented, eſcape the moſt attentive eyes, and can be fixed on the memory alone; for of what ſervice are heads differently figured, and tails differently directed, to the intervals which they ought to expreſs? Such ſigns as thoſe have nothing in them which ſhould make them preferable to others; the neatneſs of the figure, and the little place which it takes up, are advantages which might be found in a ſyſtem entirely different: chance may have given the firſt ſigns, but we muſt have a choice more peculiar to the thing in thoſe which ſhould be ſubſtituted in their place. Thoſe which have been propoſed in 1743, in a little work, intitled, "Diſſertation on the Modern Muſic," having this advantage, their ſimplicity perſuades me to lay down their abridged ſyſtem in this article.

The characters of muſic have a double object, viz. to repreſent the ſounds, firſt, according to their different intervals from flat to ſharp, which conſtitutes the air and harmony. Secondly, according to their different relative durations from quick to ſlow, which determines the time and meaſure.

In the firſt caſe, in whatever method we turn and combine written and regular muſic, we can never find any combinations therein but of the ſeven notes of the gamut, carried in different octaves, or tranſpoſed on different degrees, according to the time and mode which we have choſen. The author expreſſes theſe ſeven ſounds by the ſeven firſt cyphers; ſo that the cypher 1 forms the note ut, 2 the note re, 3 the note mi, &c. and he traverſes them with a horizontal line, as in the example.

The Octave in aſcending.

1

—1—2—3—4—5—6—7—

ut, re, mi, fa, ſol, la, ſi, ut.

He writes above the line the notes which continuing to aſcend, would be found in the ſuperior octave; wherefore ut, which immediately follows ſi, aſcending a ſemi-tone, ſhould be above the line in this manner $\overline{4}^{1}$; and in the ſame manner the notes which belong to the ſharp octave, of which this ut is the beginning, ought to be all above the ſame line. If we entered into a third octave in ſharp, we have only to traverſe the notes by a ſecond accidental line above the firſt.

If, on the contrary, we would deſcend into the octave inferior to that of the principal line, we muſt write immediately below that line, the notes of the octave which follow it deſcending: if

then

then you deſcend an octave, add a line below, as you have placed one above, to aſcend, &c. By means of three lines only, you may go through the whole extent of five octaves, which cannot be done in our ordinary muſic in leſs than eighteen.

We may even manage without drawing any line. We place all the notes horizontally in the ſame rank: if we find a note which paſſes the ſi of the octave wherein we are in aſcending, i. e. which enters into a higher octave, we place a point on this note. This point ſuffices for all the following notes which remain without interruption in the octave wherein we are entered. If we re-deſcend from one octave to the other, it will require another point under the note by which we enter therein, &c. We ſee in the following example the progreſs of two octaves, as well aſcending as deſcending, marked in this manner.

1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 7 6 5 4 3 2 1 7 6 5 4 3 2 1

The firſt method of marking with lines is ſuitable to muſic greatly laboured, and very difficult for large partitions, &c. The ſecond with points is proper for ſimple muſic, and trifling airs, but nothing hinders us from uſing it at our pleaſure in the place of the other; and the author has made uſe of it in tranſcribing the famous Arietta, "*L'Objet qui regne dans mon Ame*," which we find pricked in partition by the cyphers of that author, at the end of his work.

By this method, all the intervals become ſo evident, that nothing can equal it: the octaves always bear the ſame cypher; the ſimple intervals are always known in their doubles or compoſition. We inſtantly diſcover in the tenth $\frac{3}{1}$ or 13, that it is the octave of the major third; the major intervals can never be confounded with the minor: 24 will be continually a minor third; 46 a major third. The poſition has nothing to do with that.

After having thus reduced the whole extent of the keys, under a much ſmaller compaſs, with much clearer ſigns, we now paſs to the tranſpoſitions.

There are only two modes in our muſic. What is ſinging or playing in re major? It is tranſporting the ſcale or the gamut of ut a tone higher, and placing it on re as tonic or fundamental.

All the references which belonged to ut paſs to re by this tranſpoſition. It is to expreſs this ſyſtem of connections, raiſed or lowered ſo much, that ſo many alterations of dieſis and B's flat have been thought neceſſary on the cleff. The author of the New Syſtem ſuppreſſes all this embarraſſment at a ſtroke. The ſingle word re, plac'd at top, and in the margin, gives us

notice, that the piece is in major re; and as then the re takes all the connections which ut had, it takes alſo its ſign and name. It is marked with the cypher 1, and all its octave follows by the cyphers 2, 3, 4, &c. as before. The re of the margin ſerves as its cleff, it is the touch re or D of the natural key; but this ſame re becomes a tonic under the name of ut, and becomes alſo the fundamental of the mode.

But this fundamental, which is tonic in the major tones, is only mediant in the minor; the tonic which takes the name of la, being then found a minor third below this fundamental. This diſtinction is made by a ſmall horizontal line drawn under the cleff. Re, without this line, expreſſes the major mode of re; but re, with the line under it, deſigns the minor mode of ſi, of which this re is the mediant. This diſtinction, which ſerves only to determine clearly the tone by the cleff, is not more neceſſary in the new ſyſtem than in the ordinary note, wherein it is not placed. Wherefore, though no attention ſhould be paid to it, we could not ſol fa leſs exactly. Inſtead of the ſame names of the notes, we might make uſe, for cleffs, of the letters of the gamut, which anſwers to them, C for ut, D for re, &c. (Vide Gamut)

The muſicians affect a great deal of contempt for the method of tranſpoſitions, doubtleſs, becauſe it renders the art too eaſy. The author ſhows that this contempt is ill founded: that it is their method we ſhould deſpiſe, ſince it is laborious to no end; and the tranſpoſitions, whoſe advantage he ſhows, are, even without reflecting on them, the true rule which all the great muſicians and good compoſers follow. (Vide Tranſpoſition)

The tone, the mode, and all their connections well determined, it is not ſufficient to make all the notes of each octave be known, nor the paſſage from one octave to another by clear and preciſe ſigns; we muſt, beſides, expreſs the part of the keys, which theſe octaves employ. If I have a ſol to tune, it muſt be known which, for there are five in the keys, the one high, the other middle, the other low, according to the different octaves; theſe octaves have each their letters; and one of theſe letters placed on the line, which ſerves as a ſtave, denotes to what octave that line belongs, and, conſequently, the octaves which are above and below. We muſt ſee the figure at the end of his book, and the explanation the author gives to it, to be able to judge of this part of his ſyſtem, which is amongſt the moſt ſimple.

It remains, for the expreſſion of all the poſſible ſounds in our muſical ſyſtem, to render the accidental alterations introduced by the modulation, which may be eaſily done. The dieſis is form'd by traverſing the note with a ſtroke aſcending from the left to the

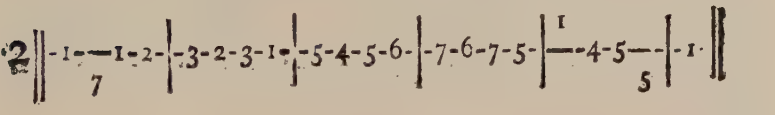
the right, in this manner: fa dieſis 4; ut dieſis 1. We mark the B flat by a ſimilar mark deſcending, ſi B flat 7; mi B flat 3. In regard to B ſharp, the author ſuppreſſes it as an uſeleſs ſign in his ſyſtem.

This part being thus filled, we muſt now come to the time and meaſure. The author lays all waſte before him on this crowd of different meaſures, with which the muſic has been ſo improperly loaded. He knows only two like the ancients, viz. two-tim'd and three-tim'd meaſures. The times of each of theſe meaſures may, in their turn, be divided into two or three equal parts. From theſe two combined rules, he draws exact expreſſions for all the poſſible movements.

We connect in ordinary muſic the different powers of the notes to that of a particular note, which is the ſemi-breve, which cauſes that the powers of this note continually varying, the notes compared with it have no fixed powers. The author handles it differently. He determines the power of the notes only on the kind of meaſure in which they are uſed, and on the time which they employ therein, which diſpenſes him from having, for theſe powers, any particular ſign beſides the place which it fills.

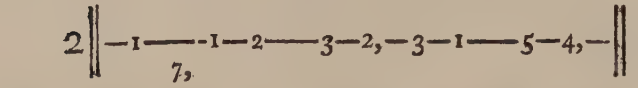
One ſingle note between two bars fills a whole meaſure. In the meaſure of two times, two notes filling up the meaſure, form each of them a time. Three notes do the ſame thing in a three-tim'd meaſure. If there are four notes in a two-tim'd meaſure, or ſix in a meaſure of three, it is, that each time is divided into two equal parts; we paſs then two notes for a time; we paſs three when there are ſix notes in one, and nine in the other. In a word, when there is no ſign of inequality, the notes are equal, their number is diſtributed in a meaſure according to the number of the times, and the nature of the meaſure: To render this diſtribution more eaſy, we ſeparate, if we chuſe it, the times by comma's; ſo that in reading muſic, we ſee clearly the power of the notes, without its being neceſſary to give them, on that account, any particular figures.

Example of equal Powers.



Idem,

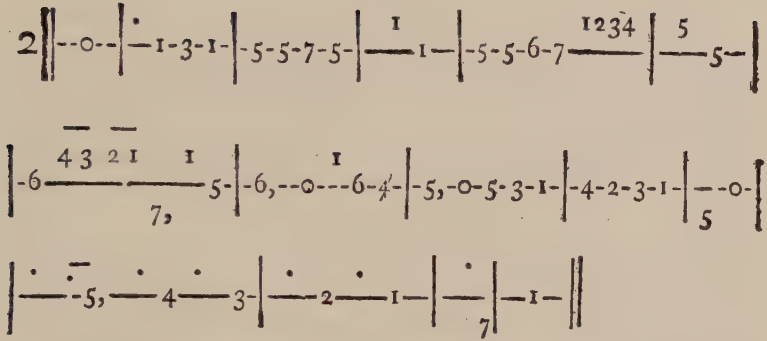
Idem, ſeparating the Times by Comma's, &c.




The unequal diviſions are marked with the ſame facility. Theſe inequalities are never more than ſub-diviſions, which are brought into an equality by a ſtroke, with which two or more notes are covered. For inſtance, if a time contains a demi-crotchet and two double demi-crotchets, a ſtroke in a right line above or below the two double demi-crotchets, will ſhew that they form together only a quantity equal to the preceding, and conſequently, one demi-crotchet; wherefore, the entire time is found divided into two equal parts, viz. The ſingle note, and the ſtroke which comprehends two. There are alſo ſub-diviſions of inequality, which may require two ſtrokes, as, if a demi-crotchet pointed was followed by two triple demi-crotchets, in that caſe, a ſtroke on the two notes would be firſt neceſſary, to repreſent the triple demi-crotchets, which would render them together equal to the point; then a ſecond ſtroke, which covering the precedent ſtroke and the point, might render all that it cover'd equal to the demi-crotchet. But whatever quickneſs the notes may have, theſe ſtrokes are never neceſſary but when the powers are unequal, and whatever inequality there may be therein, we ſhall never want more than two ſtrokes, particularly in ſeparating the times by ſtops, as we may ſee in the example following.

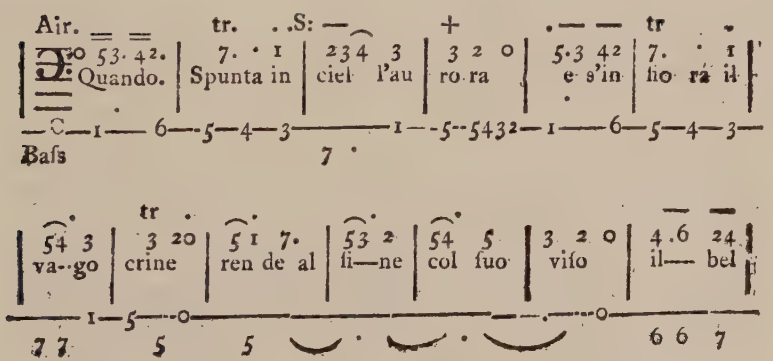
The author of the new ſyſtem uſes the point alſo, but otherwiſe than in ordinary muſic: In this, the point is equal to half of the note which precedes it; in his, the point, which alſo marks the prolongation of the preceding note, has no other power than that of the place which it fills: If the point fills a time, it is equal to a time; if it fills a meaſure, it is equal to a meaſure; if it is in a time with another note, it is equal to the half of this time. In a word, the point is reckoned as a note, is meaſured as the notes, and to mark line's or ſyncope's, we may make uſe of ſeveral points together, of equal or unequal powers, according to thoſe of the times or meaſures which theſe points are to fill.

All the ſilences are in want of one character only, which is the O. This is uſed as the notes, and as the point. The point is marked after it to prolong a ſilence, as after a note to prolong a ſound. (Vide the example of this):



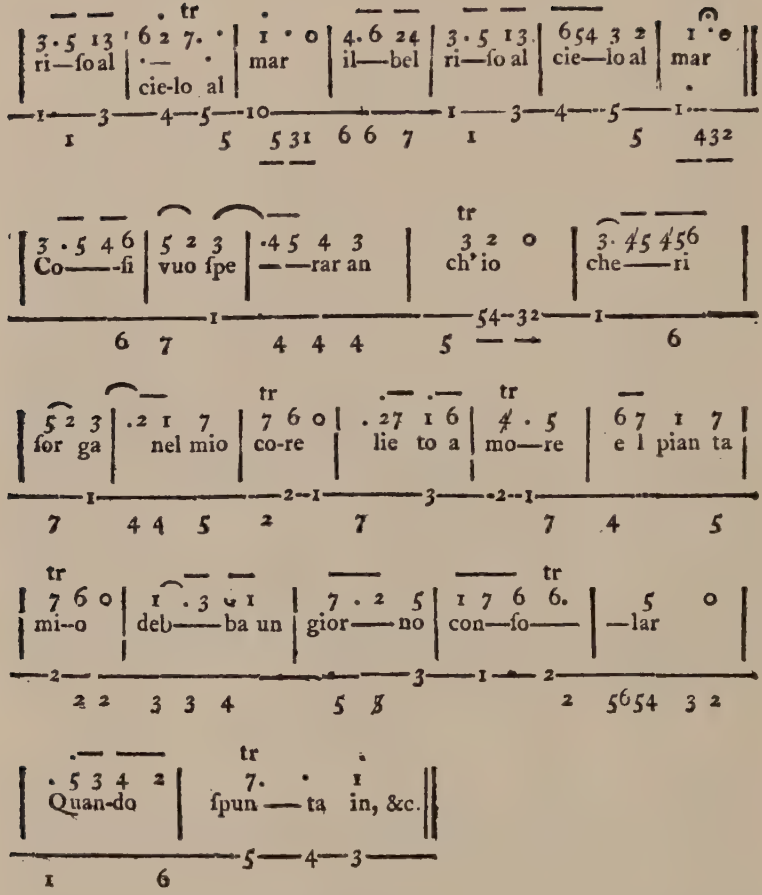
Such is the abridgement of this new ſyſtem. We will not follow the author in the account of his rules, or in the compariſon which he makes with the characters uſed, and his own; we muſt certainly expect he will place all the advantage on his own ſide; but this prepoſſeſſion ſhould not lead the reader, who is impartial, from examining the reaſons which the author gives in his book. As the author is the compoſer of this Dictionary, he cannot mention any thing more under this article, without removing from the duty which he ought to attend to herein. —— Vide an air written in new characters, but it will be very difficult to decypher the whole of it properly, without recourſe to the book itſelf, becauſe an article of this Dictionary ought not to be a book, and in the explanation of ſo complicated an art, it is impoſſible to ſay all in a few words.

Air to ſing with a Baſs.




Continued.

Continued.


3 5 13 ri—ſo al
6 2 7 cie-lo al
1 0 mar
4 6 24 il—bel
3 5 13 ri—ſo al
6 5 4 3 2 cie—lo al
1 e mar
3 5 4 6 Co—fi
5 2 3 vuo ſpe
4 5 4 3 —rar an
3 2 0 ch'io
3 4 5 4 5 6 che—ri
5 2 3 ſor ga
2 1 7 nel mio
7 6 0 co-re
2 7 1 6 lie to a
4 5 mo—re
6 7 1 7 e l pian ta
7 6 0 mi—o
1 3 1 deb—ba un
7 2 5 gior—no
1 7 6 6 con—ſo—
5 —lar
5 3 4 2 Quan-do
7 ſpun—ta
1 in, &c.

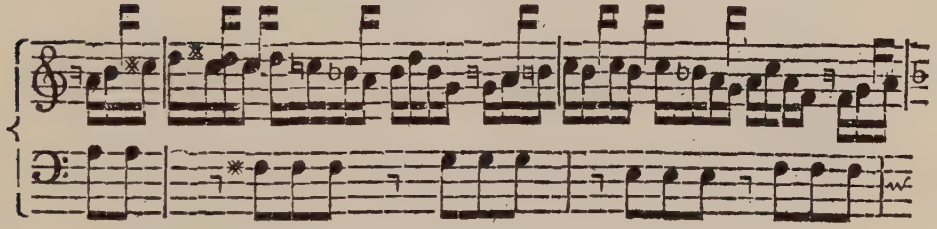
SENSIBLE NOTE, Is that which is a major third above the dominant, or a ſemi-tone below the tonic. The ſi is a ſenſible note in the tone of ut, the ſol dieſis in the tone of la.

It is called ſenſible note becauſe it makes the tone and tonic be felt, on which, after the concord dominant, the ſenſible note taking the ſhorteſt way, is obliged to aſcend; which occaſions that ſome treat this ſenſible note as a major diſſonance, thro' fault of ſeeing that the diſſonance, being a connection, cannot be conſtituted but by two notes.

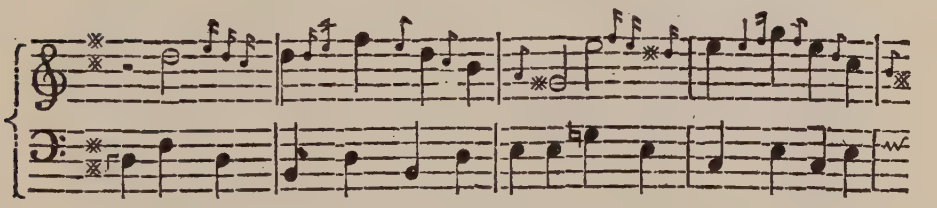
I do not ſay that the ſenſible note is the ſeventh of the tone, becauſe, in the minor mode, this ſeventh note is ſenſible only in aſcending; for, in deſcending, it is a tone of the tonic, and in the minor third of the dominant. (Vide Mode, Tonic, Dominant.)

NOTES OF TASTE. There are two kinds of them. The one which belongs to the melody, but not to harmony; ſo that tho' they enter into the meaſure, they do not in the concord: theſe are marked in full. The other notes of taſte, entering neither into harmony or melody, are marked only with ſmall notes, which are not reckoned in the meaſure, and whoſe very rapid duration is taken on the note which precedes, or that which follows. Vide an example of the notes of taſte in their two kinds.

Notes of Taſte of the firſt Kind.



Notes of Taſte of the ſecond Kind.



NOTHUS. This is the epithet given by ſome to the hypophrygian mode, which has its final in ſi, and conſequently its fifth falſe, which cuts it off from the authentic modes; and to the æolian, whoſe final is in fa, and the fourth ſuperfluous, which removes it from the number of plagal modes.

TO NUMBER THE CLEFF. Is to place in it the number of dieſis's, or B's flat, ſuitable to the tone and mode in which we chuſe to write our muſic. (Vide B Flat, Cleff, Dieſis.)

NUNNIA. Was, amongſt the Greeks, a ſong peculiar to nurſes. (Vide Song.)

# O.

O. This capital letter, form'd in a circle, or double C ↄ, is, in our ancient muſic, the ſign which is called perfect time; that is, of triple meaſure, or three-time'd, with the difference of the imperfect time, or double meaſure, which was marked by a ſimple C, or an O divided on the right or left C or ↄ.

The imperfect time was ſometimes marked by a ſimple O; ſometimes by an O pointed within, in this manner, ⊙; or by an O barr'd, ⌀. (Vide Time.)

OBLIG'D. We call an oblig'd part, that which ſometimes recites, that which we cannot remove without ſpoiling the harmony or the air, which diſtinguiſhes it from the parts of fulneſs, which are added only as a greater perfection of harmony, but by the removal of which, the piece is by no means mutilated. Thoſe who are in the parts of fulneſs may ſtop when they chooſe; the muſic proceeds the ſame: But he who is buried in the oblig'd parts, cannot quit them an inſtant without failing in the execution.

OCTACHORD. An inſtrument or ſyſtem of muſic, compoſed of eight ſounds or ſeven degrees. The octachord or lyre of Pythagoras comprehended the eight ſounds expreſſed by theſe letters, E, F, G, a, ♮, c, d, e, that is, two diſjoint tetrachords.

OCTAVE. The firſt of the conſonances in the order of their generation. The octave is the moſt perfect of the conſonances; it is, after the uniſon, that of all the concords whoſe connection is the moſt ſimple; the uniſon is in the computation of equality, that is, as 1 to 1. The octave is in double computation, that is, as 1 to 2. The harmonies of the two ſounds agree in each without exception, which has no place in any other interval.

Laſtly, theſe two concords have ſo much conformity, that they are often confounded in melody, and in harmony itſelf we take them indifferently one from the other.

This interval is called octave, becauſe, to move diatonically from one of theſe terms to the other, we muſt paſs by ſeven degrees, and make eight different ſounds be heard.

Here are the properties which diſtinguiſh the octave ſo ſingularly from all the other intervals.

1. The octave confines within its bounds all the primitive and original ſounds; ſo after having eſtabliſhed a ſyſtem, or a collection of ſounds, in the extent of an octave, if we wiſh to prolong that collection, we muſt neceſſarily retake the ſame order in a ſecond octave, by a ſimilar ſeries, and the ſame thing for a third

third and fourth octave, where we ſhall not find any ſound which is not the replique of the firſt. Such a ſeries is called ſcale of muſic in its firſt octave, and replique in all the reſt. It is in virtue of this propriety of the octave, that it has been called diapaſon by the Greeks. (Vide Diapaſon.)

II. The octave takes in alſo all the conſonances, and all their differences; that is, all the ſimple intervals, as well conſonant as diſſonant, and, conſequently, the whole of harmony. Let us eſtabliſh all the conſonances on a ſame fundamental ſound, we ſhall have the following table:

| 120 | 100 | 96 | 90 | 80 | 75 | 72 | 60 |
|---|---|---|---|---|---|---|---|
| 120. | 120. | 120. | 120. | 120. | 120. | 120. | 120. |

which anſwers to this:

$$1.\ \frac{5}{6}\cdot\frac{4}{5}\cdot\frac{3}{4}\cdot\frac{2}{3}\cdot\frac{5}{8}\cdot\frac{3}{5}\cdot\frac{1}{2}.$$

Where we find all the conſonances in this order: the minor third, the major third, the fourth, the fifth, the ſixth minor, the ſixth major, and, laſtly, the octave. By this table, we ſee that the ſimple conſonances are all contained between the octave and uniſon. They may even be heard at a time in the extent of an octave without any mixture of diſſonances. Strike, at the ſame time, theſe four ſounds, ut, mi, ſol, ut, aſcending from the firſt ut to its octave, they will form together all the conſonances, except the major ſixth, which is compoſed, and will form no other interval. Take any two of theſe ſounds, the interval will be always conſonant: 'tis from this uniſon of all the conſonances that the concord which produces them is called perfect concord.

The octave, giving all the conſonances, gives, conſequently, all their differences, and by them all the ſimple intervals of our muſical ſyſtem, which are only the differences themſelves. The difference of the major and minor third gives the minor ſemi-tone; the difference of the major third and fourth gives the major ſemi-tone; the difference of the fourth and fifth gives the major tone; and the difference of the fifth and ſixth major gives the minor tone. Moreover, the minor ſemi-tone, the major ſemi-tone, the minor and major tones, are the only elements of all the intervals in our muſic.

III. Every ſound conſonant with one of the terms of the octave, is conſonant alſo with the other. Conſequently, every ſound diſſonant with one, is diſſonant with the other.

IV. Laſtly, the octave has this propriety alſo, the moſt ſingular of all, that it can be added to itſelf, tripled, and multiplied at pleaſure, without changing its nature, and without its product ceaſing to be a conſonance.

This multiplication of the octave, as well as its diviſion, is however bounded in regard to us, by the capacity of the auditive organ; and an interval of eight octaves already exceeds that capacity. (Vide Extent.) The octaves themſelves loſe ſomething of their harmony in being multiplied; and, beyond a certain meaſure, all the intervals are leſs eaſy for the ear to catch; a double octave begins already to be leſs agreeable than a ſimple; a triple than a double; laſtly, in the fifth octave, the extreme diſtance of its ſounds deprives the conſonance nearly of the whole of its beauty.

It is from the octave that we draw the ordained generation of all the intervals by harmonic diviſions and ſub-diviſions. Divide harmonically the octave 3. 6. by the number 4. you will have on one ſide the fourth, 3. 4. and on the other ſide the fifth, 4. 6.

Divide, in the ſame manner, the fifth, 10. 15. harmonically by the number 12. you will have the minor third, 10. 12. and the major third 12. 15. Laſtly, divide the major third 72. 90. again, harmonically by the number 80. you will have the minor tone 72. 80. or 9. 10. and the major tone 80. 90. or 8. 9, &c.

We muſt take notice, that theſe harmonic diviſions give always two unequal intervals, the leaſt of which is in flat, and the greater in ſharp. If we make the ſame diviſions in arithmetical proportion, we ſhall have the ſmalleſt interval in ſharp, and the greater in flat. Wherefore the octave 2. 4. arithmetically divided, will immediately give the fifth 2. 3. in flat, then the fourth 3. 4. in ſharp. The fifth 4. 6. will firſt give the major third 4. 5. then the minor third 5. 6. and ſo with the reſt. We ſhould have the ſame connections in contrary ſenſes, if, inſtead of taking them, as I do here, by vibrations, we took them by the lengths of the chord. This knowledge is beſides of little utility in itſelf, but it is neceſſary to underſtand the ancient authors.

The complete and rigorous ſyſtem of the octave is compoſed of three major tones, two minor, and two major ſemi-tones. The temperated ſyſtem is of five equal tones, and 2 ſemi-tones, forming together as many diatonic degrees on the ſeven ſounds of the gamut, as far as the octave of the firſt. But as every tone may be divided into two ſemi-tones, the ſame octave is divided alſo chromatically into twelve intervals, each of a ſemi-tone, the ſeven precedent of which retain their name, and the five others take

take each the name of the diatonic ſound neareſt to it, below by dieſis, and above by B flat (Vide Scale.)

I do not ſpeak here of diminiſhed or ſuperfluous octaves, becauſe this interval is ſeldom changed in melody, and never in harmony.

It is forbidden, in compoſition, to make two octaves together, between different parts, particularly in a ſimilar movement; but this is permitted, and even elegant, formed on purpoſe, and à propos, through the whole of an air or a period: It is in this manner, that in ſeveral concerto's, all the parts take by intervals the rippieno, in octave or uniſon.

On the rule of the octave. (Vide Rule.)

TO OCTAVE. When we force the air in a wind inſtrument, the ſound immediately aſcends to the octave: this is what we call to octave. In ſtrengthening the inſpiration thus, the air being incloſed in the pipe, and conſtrained by the exterior air, is obliged, in yielding to the quickneſs of the oſcillations, to be divided into two equal columns, having each the half of the length of the pipe: It is in this manner that each of theſe halves ſounds the octave of the whole. A chord of the violincello octaves by a ſimilar principle, when the ſtroke of the bow is too rough, or too near the bridge. It is a fault in the organ when a pipe octaves. This happens from its receiving too much air.

ODE. A Greek word which ſignifies an air, or ſong.

ODEUM. This was, amongſt the ancients, a place deſtined for the repetition of the muſic which was to be ſung on the ſtage, as in the opera of Paris, is the little theatre du Magaſin.

The name of odeum was given ſometimes to buildings which had no connection with the theatre. We read in Vitruvius, that Pericles ordered an odeum to be built at Athens, where they diſputed for the rewards of muſic; and in Pauſanias, that Herod, the Athenian, conſtructed a magnificent odeum, as the ſepulchre of his wife.

The Eccleſiaſtic writers deſign alſo ſome times the choir of a church, by the word odeum.

OPERA. A dramatic and lyric ſpectacle, where we uſe our endeavours to reunite all the charms of the fine arts, in the repreſentation of a paſſionate action, to excite, by the aſſiſtance of agreeable ſenſations, the intereſt and illuſion.

The conſtitutive parts of an opera, are the poem, the muſic, and the decorations. By poetry we ſpeak to the mind; by muſic to the ear; and by painting to the eyes; and the whole ought to be reunited to move the heart, and convey to it, at the ſame time, the ſame impreſſion through different organs. Of theſe three parts, my ſubject does not permit me to conſider the firſt

and

and laſt, but by the connection which they may have with the ſecond. Wherefore I paſs immediately to *that*.

The art of combining the ſounds agreeably, may be viewed under two different aſpects. Conſidered as an inſtitution of nature, muſic bounds its effect by the ſenſation and phyſical pleaſure which reſults from it, by the melody, harmony, and rhyme. Such is ordinarily the church-muſic; ſuch are the tunes for dancing, and thoſe of ſongs. But as an eſſential part of the lyric ſcene, whoſe principal object is the imitation, muſic becomes one of the fine arts, capable of painting every picture, of exciting every ſentiment, of harmonizing with poetry, giving it a new ſtrength, embelliſhing it with new charms, and triumphing by its means at the time that it crowns it.

The ſounds of the ſpeaking voice, neither ſuſtained, nor harmonious, are not appreciable, and, conſequently, cannot be agreeably allied with thoſe of the ſinging voice and inſtruments, at leaſt, in our languages, too much removed from a muſical character; for we cannot underſtand the paſſages of the Greeks in their method of reciting, but by ſuppoſing their language to be accented in ſuch a manner, that the inflections of the diſcourſe in a ſuſtained declamation, form between themſelves muſical and appreciable intervals; ſo we may ſee that their theatrical pieces were a kind of opera, and 'tis for this ſame reaſon, that there could be no opera properly called ſo amongſt them.

By the difficulty of uniting the air to the diſcourſe in our languages, it is eaſy to perceive, that the intervention of the muſic, as an eſſential part, muſt give the lyric poem a character different from that of tragedy and comedy, and make a third from it in the nature of a drama, which has its particular rules; but theſe differences cannot be determined without a perfect knowledge of the part added, of the methods to unite it with the words, and of its natural relation with the human heart: ſtudies which belong leſs to the artiſt than to the philoſopher, and which muſt be left for a pen formed to brighten every art, to ſhew to thoſe who profeſs them, the principles of their rules, and to men of taſte, the ſources of their pleaſures.

Confining myſelf, then, to ſome obſervations on this ſubject, more hiſtorical than reaſoned, I ſhall firſt take notice, that the Greeks had not, in their theatre, a lyric genus as ourſelves; and what they called by that name, was not at all ſimilar to it. As they had much accent in their language, and but little *noiſe* in their concerts, all their poetry was muſical, and all their muſic declamatory; ſo that their airs were little more than a ſuſtained diſcourſe, and they really ſung their verſes as they expreſs at the head of their poems, which has given the Latins firſt, then ourſelves,

ourſelves, by imitation, the ridiculous cuſtom of ſaying, "I ſing," when we do not ſing. "Arma virumque *Cano*." In regard to what they called lyric genus in particular, it was an heroic poeſy, whoſe ſtyle was pompous and figured, which was accompanied by the lyre or cithara, in preference to every other inſtrument. It is certain, that the Greek tragedies were recited in a manner very ſimilar to the air, that they were accompanied with inſtruments, and that choruſſes compoſed a part of them.

But if, on this account, it is thought that they were opera's like to ours, we muſt then imagine opera's without airs, for it ſeems to me ſufficiently proved, that the Greek muſic, without even excepting the inſtrumental, was nothing more than a real recitative. It is true, that this recitative, which reunited the charm of the muſical ſounds to the whole harmony of poetry, and to all the force of declamation, muſt have much more energy than the modern, which cannot enjoy one of theſe advantages but at the expence of the reſt. In our living languages, which in general carry with them the ſcent of the rudeneſs of that climate wherein they are original, the application of the muſic to the words is much leſs natural. A doubtful proſody is a bad agreement with the regularity of meaſure. Syllables mute without ſound, articulations which are rough, ſounds little harmonious and leſs varied, are with difficulty connected to melody; and a poetry cadenc'd by the number of ſyllables only, receives a harmony little felt in muſical rhyme, and is inceſſantly oppoſed to the diverſity of powers and their movements. Here are difficulties which ſhould be conquered or eluded in the invention of the lyric poem. It was then endeavoured, by a choice of words, turns and verſes, to make a proper language; and this language, which was called lyric, was rich or poor, in proportion to the ſweetneſs or roughneſs of that from whence it was derived.

Having, in ſome reſpects, prepared the words for the muſic, it was then neceſſary to apply the muſic to the words, and to render it proper in ſuch a manner on the lyric ſcene, that the whole might be taken for a ſingle and the ſame idiom, which produced the neceſſity of continually ſinging, to appear always ſpeaking; a neceſſity which reaſonably ariſes from a language being little muſical: for the leſs ſweetneſs and accent a language has, the more the alternative paſſage of the words to the air, and the air to the words, becomes rough and diſguſting to the ear. From thence ariſes the want of ſubſtituting, in the place of the diſcourſe in recital, a diſcourſe in muſic, which might ſo nearly imitate it, that there ſhould be only the juſtneſs of the concords which could diſtinguiſh it from the words. (Vide Recitation.)

This

This method of uniting on the theatre the muſic to the poetry, which amongſt the Greeks was ſufficient for the intereſt and illuſion, becauſe it was natural, by the contrary reaſon could not ſuffice amongſt us by the ſame ending. In liſtening to a conſtrained and hypothetic language, we have ſome trouble to conceive what is ſaid: with much noiſe they afford little emotion. From thence ariſes the neceſſity of introducing a phyſical pleaſure to the aſſiſtance of the moral, and to ſupply, by the attraction of harmony, what is wanting in the energy of expreſſion. Wherefore, the leſs we know how to touch the heart, the more we muſt endeavour to flatter the ear. We are obliged to ſeek in ſenſation, that pleaſure which ſentiment denies us. Hence is the origin of airs, choirs, ſymphony, and of that enchanting melody with which modern muſic is often embelliſhed, at the expence of the poetry, but which the man of taſte baniſhes from the theatre, when he is flattered without emotion.

At the firſt riſe of the opera, its inventor, wiſhing to elude what had very little nature, viz. the union of muſic to the diſcourſe, in the imitation of human life, reſolved to tranſport the ſcene to the heavens and hell, and, thro' an ignorance of making mankind ſpeak, they choſe rather to make gods and devils ſing, than heroes and ſhepherds. Very ſoon the marvellous became the foundation of the lyric theatre, and, contented with enriching themſelves with a new genus, they did not even pay attention to find whether they had choſen one that was ſuitable. To ſuſtain ſo ſtrong an illuſion, it was neceſſary to drain all that human art could imagine moſt ſeducing amongſt a people whoſe moſt ardent paſſions were the love of pleaſure, and that of the fine arts. That celebrated nation, in which there remains nothing of its ancient grandeur, but that of the ideas in the fine arts, laviſhed all its taſte and ingenuity to give this new ſpectacle all the eclat it ſtood in need of. Through the whole of Italy were ſeen theatres equal to the palaces of their kings, and, in elegance, like the monuments of antiquity, with which it was filled. They invented, to adorn them, the art of perſpective and decoration. Artiſts of every kind diſplayed their talents to the utmoſt. The moſt ingenious machines, the boldeſt flights, tempeſts, thunder, lightning, and all the inventions of art, were uſed to faſcinate the eye, whilſt multitudes of inſtruments and voices aſtoniſhed the ear.

With all this the action continued cold, and every ſituation was unintereſting. As there was no plot but what was eaſily diſcovered by the aſſiſtance of ſome god, the ſpectator, who knew the whole power of the poet, left him quietly the function of preſerving his heroes from the greateſt dangers. Wherefore, the preparations

preparations were immenſe, and produced little effect, becauſe the imitation was always flat and imperfect; the action taken unnaturally was unintereſting to us; and the ſenſes pay little regard to the illuſion when the heart is unconcerned; ſo that on a computation of the whole, it would have been difficult to have tir'd an audience with greater expence.

This ſpectacle, imperfect as it was, became a long time the admiration of contemporaries, who knew no better. They even congratulated it on the diſcovery of ſo fine a genus. "Here, "ſaid they, is a new principle joined to thoſe of Ariſtotle: here "is admiration joined with terror and pity." They did not perceive that this apparent richneſs was at bottom no more than a ſign of ſterility, as the flowers which cover the field before harveſt. It was a want of knowing how to touch the paſſions that they wiſhed to ſurpriſe; and this pretended admiration, was, in effect, no more than a childiſh aſtoniſhment, which they ought to have bluſh'd at. A falſe appearance of magnificence and enchantment, impoſed on them to ſuch a degree, that they ſpoke with enthuſiaſm of a theatre, which deſerved only hiſſings: They had, with the moſt profound belief, as much veneration for the ſtage itſelf, as for the chimerical objects which they endeavoured to repreſent on it: as if there was a greater merit in making the king of gods ſpeak flatly, than the loweſt mortal; and that Moliere's valets were not preferable to Pradon's heroes.

Tho' the authors of theſe firſt operas had hardly any other aim than to dazzle the eye and ſtun the ear, it was difficult for the muſician not to be tempted to ſeek to draw from his art the expreſſions of the ſentiments ſcattered in the poem.

The ſongs of nymphs, the hymns of prieſts, the cries of warriors, the infernal howls, did not ſo much fill theſe vulgar drama's, but that there was ſome moment found of intereſt and ſituation, where the ſpectator requires only to take breath. Very ſoon they began to perceive, that, independantly of the muſical declamation, which the language often ill ſuited the choice of the movement, the harmony and airs was not indifferent to the things which they had to ſay, and that, conſequently, the effect of the muſic alone, bounded thus far to the ſenſes, might even reach the heart. The melody, which was ſeparated from poetry only thro' neceſſity, took a part of this independance, to give itſelf beauties, abſolute, and purely muſical: The harmony diſcovered or improved, opened new paths for it to pleaſe and move the ſoul; and the meaſure, freed from the hindrance of poetic rhyme, acquired alſo a kind of ſeparate cadence, which it held of itſelf alone.

Muſic, being by this means become a third art of imitation, had very ſoon its language, expreſſion, and paintings, independant

of poetry. The ſymphony itſelf, taught to ſpeak without the aſſiſtance of words, and very often, as lively ſentiments came from the orcheſtra as from the lips of the actors. It was then, that, beginning to be diſguſted with all this chinking emptineſs, childiſh parade of machinery, and fantaſtic images of things that were never ſeen, they ſought in the imitation of nature, paintings more intereſting and more credible. Till that time, the opera had been conſtituted as it could be; for what better uſe could be made on the ſtage, of a muſic which could paint nothing, than to uſe it in the repreſentation of things that could not exiſt, and on which no one was in a condition of comparing the image with the object? It is impoſſible to know if we are affected by the painting of the marvellous, as we ſhould be, were it preſent; whereas every man may judge by himſelf, if the artiſt has given the paſſions their true language, and if the objects of nature are truely imitated. As ſoon as muſic had learnt to paint and ſpeak, the charms of ſentiment ſoon made thoſe of fable give way: The theatre was purged of its jargon of mythology; intereſt was ſubſtituted in the place of the marvellous; the machines of poets and carpenters were deſtroyed; and the lyric drama took a more noble and gigantic form. All that could touch the heart was uſed therein with ſucceſs; they were no longer in want of impoſing by beings of invention, or rather of folly; and the gods were turned off the ſtage, when they were able to repreſent mankind. This form, more ſenſible and more regular, is alſo more ſuitable to the illuſion; they ſaw, that the maſter-piece of muſic was to make itſelf forgotten; that by throwing diſorder and trouble into the ſoul of the ſpectator, it hindered him from diſtinguiſhing the tender and pathetic accents of a groaning heroine, from the real ones of grief; and that Achilles in a rage might chill us with horror, in the very ſame language that would have diſguſted us from his lips at another time.

Theſe obſervations gave cauſe to a ſecond reformation, not leſs important than the firſt. They perceived, that nothing cold and reaſoned was neceſſary to the opera; nothing that the ſpectator could liſten to quietly enough to reflect on the abſurdity of what he heard, and 'tis in that particularly, that the eſſential difference of the lyric drama and ſimple tragedy conſiſts. All politic deliberations, all projects of conſpiration, expoſitions, recitals, ſententious maxims, in a word, every thing that ſpeaks to reaſon only was baniſhed from the language of the heart, with the turns of the mind, madrigals, and every thing which proceeds from the thoughts only. The tone itſelf of ſimple gallantry, which agrees ill with the greater paſſions, was hardly admitted in tragic ſituations, whoſe effect it almoſt always ſpoils;

for

for we never perceive better that the actor ſings, than when he ſpeaks a ſong.

The energy of all the ſentiments, the violence of all the paſſions, are then the principal object of the lyric drama; and the illuſion which forms its charm, is always deſtroyed as ſoon as the author and actor leave the ſpectator a moment to himſelf.

Such are the principles on which the modern opera is eſtabliſhed. Aportolo Zeno, the Corneille of Italy, his tender pupil, who is its Racine, have opened and improved this new career. They have dared to place the heroes of hiſtory on a theatre, which ſeemed to agree only to the phantoms of fable. Cyrus, Cæſar, Cato himſelf, have appeared on the ſtage with ſucceſs; and thoſe ſpectators who were moſt averſe to hearing ſuch men ſing, very ſoon forgot that they ſung; ſubjugated and raviſhed by the eclat of a muſic, as full of noble dignity as of enthuſiaſm and fire. We eaſily ſuppoſe, that ſentiments ſo different from ours, ought to be alſo expreſſed in another tone.

Theſe new poems which genius had created, and which itſelf only could ſuſtain, were out of the depth of thoſe muſicians who had only the mechaniſm of their art; and who, deprived of the fire of invention, and the gift of imitation, made opera's as they would have made wooden ſhoes. Hardly were the cries of the bacchanals, the conjurations of ſorcerers, all the airs which were no more than a real noiſe, baniſhed from the theatre; hardly had they endeavoured to ſubſtitute in the place of this barbarous *fracas*, the accents of paſſion, grief, threats, tenderneſs, tears, and groans, and all the motions of a troubled ſoul, when, obliged to give ſentiments to their heroes, and a language to the human heart, the Vinci's, Leo's, Pergoleſis's, diſdaining a ſervile imitation of their predeceſſors, and opening to themſelves à new path, protected it under the wings of genius, and found themſelves ſucceſsful even in their firſt attempts. But we cannot long continue in the route of the *bon Goût*, without aſcending or falling; and perfection is a point wherein it is difficult to maintain our ground. After having endeavoured and felt its force, muſic, in a condition of moving by itſelf, begins to diſdain the poetry which it ought to accompany; and thinks to ſucceed better by her own ſeparate beauties, than by thoſe which ſhe drew from her companion. It is true, ſhe propoſes to render the ideas and ſentiments of the poet, but takes, in ſome reſpects, a different language; and tho' the object is the ſame, the poet and the muſician too, ſeparated in their labours, offer at the ſame time two reſemoling images, but diſtinct, which are of mutual injury to each other. The mind, obliged to divide itſelf, chooſes and fixes on one image rather than another. The muſician then,

if he has more art than the poet, eclipſes him and effaces his glory: The actor, ſeeing that the ſpectator ſacrifices the words to the muſic, ſacrifices in his turn the geſture and theatrical action to the air and beauties of the voice, which makes the piece quite forgot, and changes the ſpectacle into a real concert. If, on the contrary, the advantage is found on the ſide of the poet, the muſic, in its turn, will become almoſt indifferent; and the ſpectator deceived by the noiſe, may take the change ſo far as to attribute, to a bad muſician, the merit of an excellent poet; and think he admires maſter-pieces of harmony, whilſt his admiration is directed only to a well compoſed poem.

Such are the errors which the abſolute perfection of muſic, and its want of application to language, may introduce into opera's in proportion to the concourſe of theſe two cauſes. Whereon we ſhould remark, that the languages moſt proper to bend under the laws of meaſure and melody, are thoſe where the duplicity which I have ſpoken of is leaſt apparent; becauſe, the muſic being connected only with the ideas of poetry, this in its turn is connected with the inflections of melody; and when the muſic ceaſes to obſerve the rhyme, the accent, and harmony of the verſe, the verſe gives way, and is uſed in the cadence of the meaſure and muſical accent. But when the language has neither ſweetneſs or flexibility, the confinement of poetry hinders it from being connected with the air; the ſweetneſs of the melody itſelf hinders it from being united with the true recitation of verſes; and we perceive, in the forced union of theſe two arts, a perpetual conſtraint which diſguſts the ear, and deſtroys, at the ſame time, the attraction of melody, and the effect of declamation. This error is without remedy; and to attempt to apply forcibly the muſic to a language which is not muſical, is to give it a greater roughneſs than it would have had without it.

By what I have ſaid thus far, it muſt be ſeen, that there is a greater connection between the eye and the decoration, and the ear and muſic, than there appears between two ſenſes which appear to have nothing common in them; and that, in certain reſpects, the opera conſtituted as it is, is not ſo completely monſtrous as it ſeems to be. We have ſeen, that by deſiring to offer to the eye the intereſt and movements, which were wanting in the muſic; they had imagined the low inventions of flying-machines; and that until they knew how to move us, they were contented with ſurpriſing us. It is therefore very natural, that muſic, become paſſionate and pathetic, ſhould baniſh to ſtrolling players, thoſe ſilly ſupplements which it ſtood in no need of it itſelf. The opera then, purged of all the marvellous which debaſed it, became

became an entertainment equally touching and majeſtic, worthy of pleaſing perſons of taſte, and intereſting a ſenſible heart.

It is certain, that as much of the pomp might have been removed from the ſpectacle as was added to the intereſt of the action; for the more perſons there are who act, leſs we are employed in the objects which ſurround them; but ſtill the ſituation of the ſcene muſt be ſuitable to the actors who ſpeak therein: and the imitation of nature, often more difficult, and always more agreeable, than that of imaginary beings, became more intereſting as it became more natural. A beautiful palace, pleaſing gardens, well executed ruins, pleaſe the eye much more than the fantaſtic image of Tartarus, Olympus, or the chariot of the ſun; an image as much inferior to that which we trace in ourſelves, as in chimerical objects: it coſts nothing to the mind to go beyond poſſibility, and to make to itſelf models of every imitation. From thence it happens, that the marvellous, tho' miſplaced in tragedy, is not ſo in the epic poems, where the imagination, always induſtrious and magnificent, is charged with the execution, and draws from it quite a different part than that which the beſt machiniſt can form on our theatre, or the ſplendor of the moſt potent monarch.

Tho' muſic, taken as an art of imitation, has ſtill more connection with poetry than painting, that, in the *manner* it is uſed on the ſtage, is not ſo ſubject as poetry to form with the muſic a double repreſentation of the ſame object; becauſe the one renders the ſentiments of mankind, and the other the image only of the place wherein they are fixed: an image which ſtrengthens the illuſion, and tranſports the ſpectator to every part wherein the actor is ſuppoſed to be placed. But this removal from one place to another, ought to have rules and boundaries: It is not permitted, in regard to this, to call forth the agility of the imagination, but by conſulting the law of nature; and tho' the ſpectator ſeeks only an attention to thoſe fictions from whence he draws his whole pleaſure, we muſt not abuſe his credulity ſo far as to make him aſhamed of it. In a word, we muſt remember, that we ſpeak to ſenſible hearts, without forgetting that we addreſs ourſelves to reaſonable people. Not that I would tranſmit to the opera, that rigorous unity of place which is required in tragedy, and which cannot be attended to but at the expence of the action, ſo that we are exact in one particular to be abuſed in a thouſand others. It would be beſides to deprive ourſelves of the advantage in the change of ſcenes, which make each other mutually proſper; it would be expoſing ourſelves by a vicious uniformity, to oppoſitions badly conceived, between the ſcene which remains continually, and the ſituations which change;

it

it would be ſpoiling, by each other, the effect of muſic and that of decoration, as if we introduced voluptuous ſymphonies amongſt rocks, or lively airs in the palaces of kings.

It is then with reaſon that the changes of the ſcene are left to ſubſiſt from act to act; and for their being regular and admiſſible, it is ſufficient that they can naturally go from the place whence they go out, to the place whereto they paſs, in the interval of time which paſſes, or which the action ſuppoſes between the two acts; ſo that, as the unity of time ought to be confined nearly within the duration of twenty-four hours, the unity of place ſhould be confined nearly within the ſpace of a day's journey. In regard to the changes of the ſcene, practiſed ſometimes in the ſame act, they appear to me equally contrary to illuſion and reaſon, and ought to be entirely aboliſhed from the theatre.

Here then is the method by which the concurrence of the acouſtic and perſpective may improve the illuſion; flatter the ſenſes by different, but analogous impreſſions; and convey to the ſoul the ſame intereſt with a double pleaſure. Wherefore it would be a great error to imagine, that the regulation of the theatre has nothing in common with that of muſic, if it was only from the general agreement which they draw from the poem. 'Tis for the imagination of the two artiſts to determine together, what that of the poet has left to their diſpoſal; and to agree ſo well in that, that the ſpectator may always feel the perfect concord of what he ſees and what he hears. But it muſt be confeſſed, that the taſk of the muſician is the greateſt. The imitation of painting is always cold, becauſe it wants that ſucceſſion of ideas and impreſſions which inflames the ſoul by degrees, and every thing is ſaid at the firſt view. The imitative powers of that art, with ſeveral apparent objects, are confined in effect to very weak repreſentation. It is one of the great advantages of the muſician, to be able to paint things which cannot be heard; whilſt it is impoſſible for the painter to paint thoſe which cannot be ſeen; and the greateſt prodigy of an art which has activity by its movements only, is to be able to form them as far as the repreſentation of repoſe. Sleep, the calm of night, ſolitude and ſilence themſelves, enter into the number of muſical paintings. The noiſe ſometimes produces the effect of ſilence; the ſilence that of noiſe: as when a man ſleeps at an equal and monotonous lecture, and wakes at the ſame inſtant it ceaſes; and it is the ſame thing with other effects. But art has ſubſtitutions more fertile, and much nicer than thoſe: it knows how to excite, by one ſenſe, motions ſimilar to thoſe which may be excited by another; and as the connection cannot be ſenſible but when the impreſſion is ſtrong, the painting, ſtripp'd of that force, gives, with difficulty, thoſe imitations

imitations to muſic which it draws from it. Though all nature ſhould ſlumber, he who contemplates it ſleeps not; and the art of the muſician conſiſts in ſubſtituting, in lieu of the inſenſible image of the object, that of the movements which its preſence excites in the mind of the ſpectator: It does not directly repreſent the thing, but it awakens in our ſoul the ſame ſentiment which we feel at the ſight of it.

So, how little ſoever the painter has to draw from the partition of the muſician, the ſkilful muſician will not leave the works of the painter without ſome profit. He will not only agitate the ſea at pleaſure, excite the flames of a conflagration, make rivers flow, the rain fall, and the torrents enlarge, but he will increaſe the horror of a frightful deſert; will ſtrengthen the walls of a ſubterraneous priſon, will calm the ſtorm, render the air peaceful, the ſky ſerene, and will extend, throughout the orcheſtra, a new and lively freſhneſs.

We have now ſeen how the union of the three arts, which conſtitute the lyric ſcene, forms between themſelves a whole, aptly united. We have endeavoured to introduce a fourth, which remains to be ſpoken of.

All the motions of the body, ordered according to certain laws to effect the eye, take in general the name of geſtures. The geſture is divided into two kinds: One is uſed as an accompaniment to the words; and the other as a ſupplement. The firſt, natural to every man who ſpeaks, is differently modified, according to men, languages and characters. The ſecond, is the art of ſpeaking to the eyes without the aſſiſtance of writing; by motions of the body, become ſigns of convention. As this geſture is moſt laborious, leſs natural to us than the uſe of words, and that it renders it uſeleſs, it excludes it, and even ſuppoſes its privation: this is what was called the art of pantomimes. To this art add a choice of agreeable attitudes, and cadenc'd movements, you will then have what we call the dance, which by no means deſerves the name of art, when it ſpeaks nothing to the mind.

This finiſhed, it is our next concern to know if dancing, being a language, and, conſequently, an art capable of imitation, may enter with the three others in the courſe of the lyric action; or if it can interrupt and ſuſpend this action, without ſpoiling the effect and unity of the piece.

Moreover, I do not ſee that this laſt caſe may even demand a queſtion. For every one perceives, that all the intereſt of a followed action depends on the continued and redoubled impreſſion, which its repreſentation makes on us; that all the objects which ſuſpend or divide the attention, are as many counter-charms

which

LIBRARY



which deſtroy that of intereſt; that by dividing the ſpectacle by other ſpectacles which are unconcerned with it, we divide the principal ſubject into independant parts, which have nothing common between them but the general connection of the matter which compoſes them; and that laſtly, the more agreeable the inſerted ſpectacles are, more the mutilation would be deformed. So that, ſuppoſing an opera divided by ſome *divertiſements* which may be imagined, if they ſuffered the principal to be forgotten, the ſpectator, at the end of each *fête*, would be as little moved as at the beginning; and to animate him afreſh, and inſpire him with a new movement, we ſhould be obliged to begin again for ever. This is the reaſon why the Italians have baniſhed from the interludes of their opera's, the comic intermedes that had been inſerted; a kind of agreeable ſpectacle, ſtriking and taken from nature, but ſo miſplaced in the middle of a tragic action, that the two pieces would mutually injure each other, and that one of the two could never intereſt but at the expence of the other.

It remains then to ſee, if, ſince the dance cannot enter into the compoſition of the lyric genus, as a different ornament, we could not make it enter as a conſtitutive part; and make an art, which ought not to ſuſpend the action, form a concurrence with it. But how can we admit, at the ſame time, two languages which mutually exclude each other, and join the pantomimic art to words which render it ſuperfluous? The language of the geſture being the reſource of dumb Perſons, or thoſe who cannot underſtand each other, becomes ridiculous between thoſe who ſpeak. We do not anſwer words by antic tricks, or geſtures by diſcourſe; otherwiſe, I do not ſee why he who underſtands the language of another, ſhould not anſwer him in the ſame tone. Suppreſs then the words if you wiſh to make uſe of dancing. As ſoon as you introduce the pantomime into an opera, you muſt inſtantly baniſh poetry, becauſe of all the unities, that of language is moſt neceſſary; and it is abſurd and ridiculous to ſay, at the ſame time, the ſame thing to the ſame perſon, both by writing, and by word of mouth.

The two reaſons that I have alledged are united in their whole force to baniſh *fêtes* and *divertiſſimens* from the lyric drama, which not only ſuſpend its action, but either ſpeak nothing, or roughly ſubſtitute another oppoſite language, whoſe contraſt deſtroys nature, weakens the intereſting parts, and, whether continued in the ſame action, or in an inſerted epiſode, equally gives a wound to reaſon. It would be much worſe, if theſe *fêtes* preſented the ſpectator with nothing but a leap without union, and a dance without an object; a gothic and barbarous tiſſue, in a kind of work, wherein every thing ſhould be painting and imitation.

We

We muſt however confeſs, that the dance is ſo advantageouſly placed on the ſtage, that it would be depriving it of one of its greateſt beauties, to remove it entirely. So, though we ought not to debaſe a tragic action by leaps, and inter-leaps, we may ſtill terminate a ſpectacle very agreeably, by giving a ballet after the opera, as a little entertainment after the tragedy. In this new ſpectacle, which has no reference to the precedent, we may alſo make choice of another language: It is another nation which appears on the ſtage. The pantomimic art or dance becoming then the language of convention, the words ſhould be baniſhed from it in their turn; and the muſic, continuing the method of union, is applied to dancing in a ſmall piece, as it was applied to the words in a greater. But before uſing this new language, we muſt create it. To begin then by giving ballets in action, without having firſt eſtabliſhed the convention of geſtures, is to ſpeak a language to perſons who have not its dictionary, and who, conſequently, will not underſtand it in the leaſt.

OPERA. Is alſo a word conſecrated to diſtinguiſh the different works of the ſame author, according to the order in which they have been printed or engraved, and which he marks himſelf in general by cyphers. Theſe two words are principally uſed for compoſitions of ſymphony.

ORATORIO. A kind of drama in Latin, or a vulgar language, divided by ſcenes, in imitation of theatrical pieces, but which is always on ſome ſacred ſubject; and ſet to muſic, to be executed in ſome church during Lent, and at other times. This cuſtom, ſo common in Italy, is not admitted in France. The French muſic is ſo little ſuitable to the dramatic genus, that it is ſufficient, for its inſufficiency, to be ſhewn on the theatre, without diſplaying it in the church.

ORCHESTRA. This was, amongſt the Greeks, the lower part of the theatre; it was formed in a half circle, and adorned with ſeats on all ſides. It was called orcheſtra becauſe it was there that the dances were performed.

Amongſt them the orcheſtra formed a part of the theatre: at Rome it was ſeparated from it, and filled with ſeats appropriated to the ſenators, magiſtrates, veſtals, and other perſons of diſtinction. At Paris, the orcheſtra of the French and Italian playhouſes, and what is beſides called the *Parquet*, is put to a ſimilar uſe.

At preſent, this word is more particularly applied to muſic, and means ſometimes the place where thoſe ſit who play on the inſtruments, as the orcheſtra of the opera-houſe; and ſometimes the place where the whole band in general are fixed, as the or-

cheſtra of the ſpiritual concert at the Chateaû de Tuilleries; and again the collection of all the ſymphoniſts. It is in this laſt ſenſe, that we ſay of the execution of muſic, that the orcheſtra was good or bad, to expreſs that the inſtruments were well or ill played.

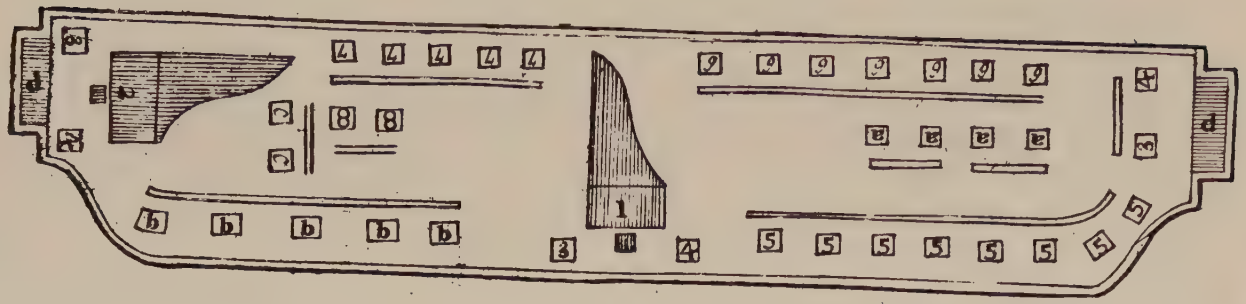
In the numerous pieces of muſic in ſymphoniſts, ſuch as that of an opera, the true diſtribution of an orcheſtra is a care not to be neglected. We owe in great part to this care, the aſtoniſhing effect of the ſymphony in the operas of Italy. The firſt attention is paid towards the fabric of the orcheſtra, that is, of the materials which it contains. They give it propoſitions proper for the ſymphoniſts to be moſt aſſembled and diſtributed in the propereſt manner. They take care to make the caſe of it of a light thin wood, to eſtabliſh it on a *vide*, with arches for ſupporters, to remove the ſpectators from it by a partition placed in the pit, at a foot or two diſtance; ſo that the body of the orcheſtra, being in a manner borne in the air, and touching hardly any thing, vibrates and reſounds without any obſtacle, and acts as a large inſtrument, which anſwers to all the reſt, and increaſes their effect.

In regard to the interior diſtribution, we muſt be careful, firſt, That the number of each kind of inſtruments be proportioned to the effect which they ſhould all produce together; that, for inſtance, the baſs ſhould not be ſtifled by the treble, or ſtifle it; that the hautboys ſhould not predominate over the violins; neither the ſeconds on the firſts. Secondly, That the inſtruments of each kind, except the baſſes, ſhould be collected together, for them to agree and move together with more exactneſs. Thirdly, That the baſſes be diſperſed around the two harpſichords, and throughout the orcheſtra, becauſe it is the baſs which ſhould direct and ſuſtain all the other parts, and all the muſicians ſhould equally hear it. Fourthly, That all the ſymphoniſts have their eyes on the maſter of his harpſichord, and the maſter on each of them, that in the ſame manner each violin be ſeen by the firſt, and the firſt ſee the reſt; for which reaſon, this inſtrument, being the moſt numerous, as it ought to be, ſhould be diſtributed into two lines which regard each other, viz. the one ſitting in front of the theatre, with their back to the ſpectators, and the others ſeated oppoſite to them, with their backs to the theatre, &c.

The firſt orcheſtra in Europe, for the number and intelligence of ſymphoniſts, is that of Naples; but the beſt diſtributed, and which form together in the moſt perfect manner, is the orcheſtra at the opera-houſe of the king of Poland, at Dreſden, directed by the illuſtrious Haſſe. Following is the repreſentation of this orcheſtra, where, without attention to the meaſures, which have not been taken in their places, we can judge better by the eye of the whole diſtribution, than we could have done on a longer deſcription.

Diſtribution of the Orcheſtra at the Opera-Houſe of Dreſden.

Directed by le Sr. Haſſe.



Explanation of the Cyphers.

1. Harpſichord of the Maſter de Chapelle.
2. Ditto of Accompaniment.
3. Violoncellos.
4. Counterbaſſes.
5. Firſt Violins.
6. Second Violins, with the Back towards the Theatre.
7. Hautboys, the ſame.
8. Flutes, the ſame.
*a*. Tenors, the ſame.
*b*. Baſſoons.
*c*. Hunting Horns.
*d*. A Tribune on each Side for the Timballs and Trumpets.

It has been remarked, that of all the orcheſtras of Europe, that of Paris, tho' one of the moſt numerous, cauſed the leaſt effect: The reaſons may be eaſily diſcovered; Firſt, the bad conſtruction of the orcheſtra, ſunk within the earth, and formed of materials of rough wood, maſſy, and loaded with iron, ſtifles every reſonance. Secondly, the bad choice of ſymphoniſts, the greateſt number of which, received thro' favour, hardly underſtand muſic, and have no idea of concinnity. Thirdly, their continual cuſtom of ſcraping, agreeing and preluding with the greateſt noiſe, without ever being in concord. Fourthly, the French genius, which generally neglects and diſdains every thing that becomes a daily duty. Fifthly, the ſhocking inſtruments for ſymphony, which, continuing fixed on the place, are intended to bellow during the time of repreſentation, and grow rotten in the interim. Sixthly, the bad placing of the maſter, who, at the forepart of the theatre, and quite buſied with the actors, cannot be ſufficiently attentive to his orcheſtra, and has it behind him, inſtead of before his eyes. Seventhly, the inſupportable noiſe of his time-ſtick, which covers and ſtifles all the effect of the ſymphony. Eighthly, the bad harmony of their compoſitions, which, being never pure and choſen, gives the ſound of a deafening and confuſed collection of inſtruments, inſtead of things which may produce an effect. Ninthly, not ſufficient counter-baſſes and violoncellos, the ſounds of which, trained after their method, ſtifle the melody and deafen the ſpectator. Tenthly and laſtly, the errors of the meaſure, and the undetermined character of the French muſic, where it is the actor always who directs the orcheſtra, inſtead of the orcheſtra directing the actor; and where the treble introduces the baſs, inſtead of the baſs conducting the treble.

ORGANIC. This was, amongſt the Greeks, that part of muſic which was executed on inſtruments; and this part had its characters, its peculiar notes, as may be ſeen in the Tables of Bacchius and Alypius. (Vide Muſic, Notes.)

TO ORGANIZE. This was, in the beginning of the invention of the counter-point, the inſertion of ſome thirds in a collection of church-muſic, in uniſon; ſo that, for inſtance, that a part of the choir ſinging theſe four notes, ut, re, fi, ut; the other part ſung, at the ſame time, theſe other four, ut, re, re, ut. It appears, by the examples cited by l'Abbe de Bœuf and others, that the organization was ſeldom practiſed but on the ſenſible note, at the approach of the final; from whence it follows, that they hardly ever organized but by a minor third. For a concord ſo eaſy and ſo little varied, the choriſters who organized did not fail being paid at a dearer rate than the reſt.

In

In regard to the organum triplum, or quadruplum, which was alſo called triplum or quadruplum ſimply, it was the ſame thing as the identical air of the organizing parts, toned by counter-tenors at the octave of the baſſes, and by trebles at the octave of the tenor.

ORTHIAN. The orthian nome, in the Greek muſic, was a dactylic, invented, according to ſome, by the ancient Phrygian Olympus; and according to others, by the Myſian. It is on this orthian nome, ſay Herodotus and Aulugelles, that Arion ſung when he threw himſelf into the ſea.

OVERTURE. A piece of ſymphony, which we endeavour to render ſplendid, flattering, harmonious, and which ſerves as an introduction to operas, and other lyric dramas of a certain extent.

The overtures of the French opera are almoſt all calculated on thoſe of Lully. They are compoſed of a continuing piece, called *Grave*, which is generally played twice, and of a dancing *Repriſe*, called gay, which is commonly fugued. Several of theſe *Repriſes* are admitted alſo into the *Grave* at its concluſion.

There was a time when the French overtures ſerved as a model for all Europe. Not ſixty years ago, they ſent from France overtures, to place at the head of their operas in Italy. I have even ſeen many ancient Italian operas marked with an overture of Lully at their head. This is what the Italians at preſent contradict, ſince the whole has had ſuch a change; but, nevertheleſs, the fact is very certain.

The inſtrumental muſic having had an aſtoniſhing progreſs within about forty years, the ancient overtures, made for the ſymphoniſts, who were little ſkilled in managing their inſtruments, were very ſoon left for the French; and they have been contented with nearly preſerving their diſpoſition. The Italians themſelves have not been ſlow in ſecuring themſelves from this hindrance; and they at preſent diſtribute their overtures in another manner. They began by a lively and pleaſing piece of two or four times; then they give an andante *á Demi jeu*, in which they aim at diſplaying all the graces of a fine muſic; and they finiſh by a brilliant allegro, generally of three times.

The reaſon they give for this diſtribution, is, that in a numerous ſpectacle, where the ſpectators make great noiſe, they ſhould perſuade them to ſilence at the firſt ſtroke, and fix their attention by ſome bold beginning which may ſtrike them. They ſay, that the grave of our overtures is neither heard, or liſtened to, by any one; and that our firſt ſtroke of the fiddle-ſtick, which we boaſt of with ſo great emphaſis, leſs noiſy than the concord of inſtruments which precedes it, and with which it is confounded, is

more ſuitable for perſuading the audience to ſlumber than attention.

They add, that after having rendered the ſpectator attentive, it is neceſſary that he ſhould be intereſted with leſs noiſe by an agreeable and flattering air, which may diſpoſe him to the tenderneſs with which he is to be inſpired; and laſtly, to put an end to the overture in another character, which, being connected with the beginning of the drama, denotes, by finiſhing with *eclat*, the ſilence which the actor, at his entrance on the ſtage, requires of the ſpectators.

Our old courſe of overtures has cauſed a pleaſant idea to be circulated in France: Many have imagined, that there was ſuch an agreement between the form of Lully's overtures, and every opera, that it could not be changed without ſpoiling the effect of the whole; ſo that, of the beginning of a ſymphony, which ſhould be in a different taſte, ſuch, for inſtance, as an Italian overture, they would ſay with contempt, that it was a ſonata, and not an overture, as if every overture was not a ſonata.

I know very well, that it would be a deſirable thing for a proper and ſenſible connection to be between the character of an overture, and that of the work which it introduces; but inſtead of ſaying that all overtures ſhould be caſt in the ſame mould, this ſays preciſely the contrary. Beſides, if our muſicians fail ſo often in catching the true connection of the muſic to the words in each piece, how can they catch the finer and more remote connections between the ordonnance of an overture, and that of the entire body of the work? Some muſicians have flattered themſelves to have caught theſe connections by collecting, before-hand in the overture, all the characters expreſſed in the piece, as if they would expreſs the ſame action twice, and that what is to come ſhould be already paſſed. It is not this. The beſt underſtood overture, is that which diſpoſes the heart of the ſpectator in ſuch a manner, as that it opens naturally to the intereſt which they endeavour to give it from the very beginning of the piece. This is the real effect that a good overture muſt produce. This is the plan on which it muſt be directed.

OXIPYCNI. Is the name which the ancients gave, in the crowded genus, to the third ſound in aſcending from each tetrachord. Wherefore, the oxipycni ſounds were five in number. (Vide Apycni, Crowded, Syſtem, Tetrachord.)

# P.

P. By abbreviation, ſignifies piano, that is, *ſweet.* (Vide Sweet.)

The double PP. ſignifies pianiſſimo, that is, very ſweet.

PANTOMIME. An air on which two or more dancers execute an action, which bears alſo the name of pantomime. The airs of pantomimes are generally a principal couplet, which returns often in the courſe of the piece, and which ſhould be ſimple, for the reaſon given at the word *Country Dance*; but this couplet is intermixed with others more lively, which ſpeak, as it were, and form an image in the ſituation where the dancer ſhould place a determined expreſſion.

PAPER RUL'D. By this name is called the paper prepared with the ſtaves entirely drawn, to mark the muſic thereon. (Vide Stave.)

There is rul'd paper of two kinds, viz. that whoſe length exceeds its breadth, ſuch as is commonly uſed in France; and that whoſe breadth is greater than its length. This laſt is the only one uſed in Italy. However, by a whim, the reaſon of which I know not, the paper-makers of Paris call *Paper rul'd a la Franſoiſe*, that which is uſed in Italy; and *Paper rul'd a l'Italienne*, that which is preferred in France.

The form whoſe breadth exceeds its length, appears moſt commodious in my opinion, either becauſe a book of this form is better laid open on a deſk, or becauſe the ſtaves, being longer, they are leſs frequently changed: Moreover, it is in the changes that muſicians are ſubject to take one ſtave for another, particularly in partitions. (Vide Partition.)

The rul'd paper uſed in Italy, has always ten ſtaves, neither more or leſs; and that makes exactly two lines or columns in the ordinary partitions, where we have always five parts, viz. two trebles of violins, the viola, the ſinging part, and the baſs. The diviſion being always the ſame, and each one finding, in the partitions, his part placed in like manner, paſſes always from one column to another without embarraſſment, or fear of miſtaking. But in the French partitions, where the number of ſtaves is not fixed and determined, either in the pages or columns, we are always obliged to heſitate at the end of each ſtave, to find, in the column that follows, the ſtave correſpondent to that wherein we are, which renders the muſician more doubtful, and the execution more ſubject to a failure.

PARADIAZEUXIS. Was, in the Greek muſic, by the tradition of old Bacchius, the interval of one tone only between the chords of two tetrachords; and ſuch is the nature of the diſjunction which acts between the tetrachord ſynnemenon, and the tetrachord diazeugmenon. (Vide thoſe words.)

PARAMESIS. This was, in the Greek muſic, the name of the firſt chord of the tetrachord diazeugmenon. We muſt remember, that the third tetrachord may be conjoined with the ſecond; then its firſt chord was the meſis, or the fourth chord of the ſecond; that is, this meſis was common to the two.

But when this third tetrachord was disjoint, it began by the chord called parameſis, which, inſtead of being confounded with the meſis, was placed a tone higher; and this tone formed the disjunction or diſtance between the fourth chord, or the ſharpeſt of the tetrachord meſon; and the firſt, or ſharpeſt of the tetrachord diazeugmenon.

Parameſis ſignifies near to meſis; becauſe, in effect, the parameſis was only a tone diſtant, tho' there was ſometimes a chord between two. (Vide Trite.)

PARANETE. Was, in ancient muſic, the name given, by ſeveral authors, to the third chord of each of the three tetrachords ſynnemenon, diazeugmenon, and hyperboleon; a chord which ſome diſtinguiſhed only by the name of the genus, wherein theſe tetrachords were uſed. So the third chord of the tetrachord hyperboleon, which is called hyperboleon diatonos, by Ariſtoxenes and Alypius, is called paranete hyperboleon, by Euclid.

PARAPHONY. Is, in ancient muſic, that kind of conſonance which does not reſult from the ſame ſounds, as the uniſon, which is called homophony; nor from the replique of the ſame ſounds as the octave, which is called antiphony; but ſounds really different, as the fifth and fourth, the only paraphonies admitted in this muſic: for, as to the ſixth and third, the Greeks did not place them in the rank of paraphonies, not even admitting them as conſonances.

PARENTHESIS. A ſign of abbreviation in the note. It is a ſmall ſtroke acroſs at the tail of a minum or crotchet, to expreſs its diviſion into demi-crotchets, to preſerve place, and prevent confuſion. The parentheſis denotes, conſequently, four demi-crotchets inſtead of a minum; or two inſtead of a crotchet. The *round* having no tail, cannot bear a parentheſis; but we may alſo make eight demi-crotchets from it, by abbreviations, by dividing it into two minums or four crotchets, to which we add the parentheſis. The copier ſhould be careful to diſtinguiſh the figure of the parentheſis, which is only an abbreviation of that of the demi-crotchet, which ſhews a real power.

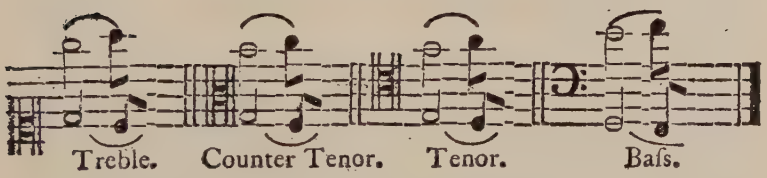
PARHYPATE,

PARHYPATE. The name of the chord which immediately follows the hypate from ſharp to flat. There were two parhypates in the diagram of the Greeks, viz. the parhypate hypaton, and the parhypate meſon. This word parhypate ſignifies ſub-principal, or bordering on the principal. (Vide Hypate.)

PARODY. An air of ſymphony, of which a ſinging air is formed by adjuſting the words. In muſic, well-compoſed, the air is made on the words; and in the parody, the words are made on the air: All the couplets of a ſong, except the firſt, are kinds of parodies; and this is, in general, what is felt too much by the method of murdering the proſody. (Vide Song.)

PART. This is the name of every voice or ſeparated melody, whoſe re-union forms the concert. To conſtitute a concord, two ſounds muſt be heard at a time, at leaſt, which a ſingle voice cannot do. To form, in ſinging, a harmony, or a collection of concords, many voices are neceſſary. The air which belongs to each of theſe voices is called part; and the collection of all the parts of a ſame work, written below each other, is called partition. (Vide Partition.)

As a complete concord is compoſed of four ſounds, there are alſo, in muſic, four principal parts, the ſharpeſt of which is called treble, and is ſung by the voices of women, children, or muſici: The other three are the counter tenor, the tenor, and baſs; which all belong to the voices of men.

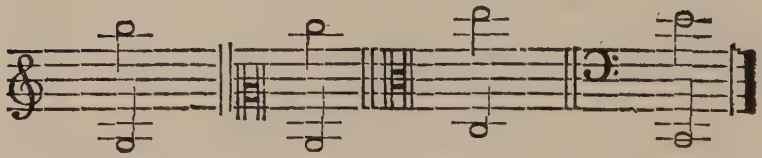
Extent of the four Vocal Parts.

We may here ſee the extent of the voice in each of theſe parts, and the cleff which belongs to it. The white notes ſhow the full ſounds, where each part may reach to an equal height and an equal deſcent; and the demi-crotchets which follow, ſhow the ſounds, where the voice begins to be forced, and which it ought to form in paſſing only. The Italian voices almoſt always exceed this extent in aſcending, particularly the trebles; but the voice becomes then a kind of *faucet*, and, whatever art it may uſe to diſguiſe it, it is certainly ſo.

Some one, or each of theſe parts, is ſub-divided, when we compoſe with more than four parts. (Vide Treble, Tenor, Baſs.)

In the firſt invention of the counter-point, there were at firſt only two parts; one of which was called tenor, and the other diſcant. Laſtly, a third was added, which had the name of triplum; and a fourth, ſometimes called quadruplum, but more commonly mottetos. Theſe parts were confounded very frequently one with the other: 'Tis but by little and little, that, extending themſelves to ſharp and flat, they have taken, with the moſt ſeparated and moſt fixed diapaſons, thoſe names which they have at preſent.

There are alſo inſtrumental parts. There are even inſtruments, as the organ, the harpſichord, the viol, which may form ſeveral parts at a time. We divide alſo the inſtrumental muſic in four parts, which anſwer to thoſe of the vocal muſic, and are called treble, fifth, tenor, and baſs; but the treble is generally ſeparated into two, and the fifth is united with the tenor, under the common name of viol.

Extent of the four Inſtrumental Parts.



Treble of the Violin. Tenor. Viola, or Fifth. Baſs.

We here find the cleffs and extent of the four inſtrumental parts; but we muſt take notice, that the generality of inſtruments have not preciſe bounds above, and that they may be extended as far as poſſible, at the expence of the ears of the audience; whereas, in the lower parts, they have a fixed term which they cannot paſs. This term is on the note which I have marked; but I have marked above only that which we may reach without looſening.

There are parts which ought to be ſung by one voice alone, or played by a ſingle inſtrument; and thoſe are called reciting parts. Other parts are executed by ſeveral perſons ſinging, or playing in uniſon; and are called concertant parts, or parts of chorus.

We call alſo part, the paper of muſic on which is written the ſeparated part of each muſician. Sometimes ſeveral ſing or play on the ſame paper; but when each has his own, as is the general practice

practice in great pieces of muſic, then, tho' in this ſenſe each concertant has his part, it cannot be ſaid, in the other ſenſe, that there are ſo many parts of concertants, whilſt the ſame part is often doubled, trebled, and multiplied in proportion to the total number of executants.

PARTITION. A collection of all the parts in a piece of muſic, where we ſee, by the re-union of the correſponding ſtaves, the harmony which they form together. We write, for this purpoſe, all the parts from ſtave to ſtave, the one below the other, with the cleff ſuitable to each, beginning by the ſharpeſt, and placing the baſs below all We arrange them, as I have ſaid at the word Copier, ſo that each meaſure of a ſtave be perpendicularly placed above or below the correſpondent meaſure of other parts, and encloſed within the ſame bars prolonged from one to another, ſo that we may ſee, at firſt ſight, all that ſhould be underſtood at a time.

As in this diſpoſition, one ſingle line of muſic comprehends as many ſtaves as there are parts, we confine all theſe ſtaves by a ſtroke of the pen, which is called column, and which is drawn on the margin at the beginning of the line thus compoſed; then we re-begin, by a new line, to trace a new column, which is filled with the remainder of the ſame ſtaves, written in the ſame order.

So, when we wiſh to follow a part, after having gone thro' the ſtave to the end, we do not paſs to that which is immediately below, but we examine what rank the ſtave that we quit holds in the column; we ſeek in the column which follows the correſpondent part, and we find therein the continuance of the ſame part.

The uſe of partitions is indiſpenſable for compoſition. He alſo who conducts a concert, muſt have the partition under his eye, to ſee if each one follows his part, and to replace thoſe who are in error. It is even uſeful to the accompaniſt to follow the harmony truly; but in regard to other muſicians, we give generally his ſeparate part to each, it being uſeleſs for him to ſee that which he does not execute.

There are, however, ſome caſes where we join, in a ſeparate part, other parts in ſimilar partitions, for the convenience of the executants. Firſt, in vocal parts we generally note the thorough baſs in partition with each reciting part, either to prevent the ſinger from the trouble of reckoning his pauſes in following the baſs, or that he may himſelf accompany in repeating or reciting his part. Secondly, the two parts of a ſinging duet are marked in partition in each ſeparate part, ſo that every ſinger, having

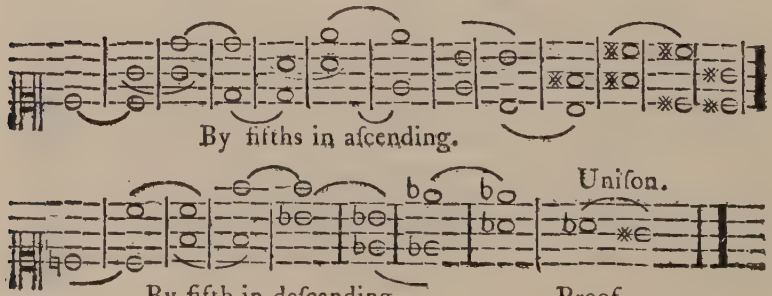
before the dialogue under his eye, may better enter into the ſpirit of it, and accord more eaſily with its counter-part. Thirdly, in the inſtrumental parts, we are cautious, in confined recitatives, to mark always the ſinging part in partition with that of the inſtrument; ſo that, in thoſe alternatives of unmeaſured airs and meaſured ſymphony, the ſymphoniſt may take the time of the ritornels true without heſitating or erring.

PARTITION. Is alſo, amongſt organ and harpſichord makers, a rule for according the inſtrument, beginning by a chord or pipe of each touch, in the extent of an octave or rather more, taken near the middle of the keys; and on this octave or partition we accord all the reſt afterwards. This is the method we follow for the formation of a partition.

On a ſound given by an inſtrument, which I ſhall ſpeak of at the word Tone, we accord in the uniſon or octave the C ſol ut, which belongs to the cleff of that name, and which is found at the middle of the keys, or nearly. We then concord the ſol, fifth ſharp of that ut; then the re, ſharp fifth of this ſol; after which, we re-deſcend to the octave of this re, on the ſide of the firſt ut. We aſcend to the fifth la, then again to the fifth mi. We re-deſcend to the octave of this mi, and continue in the ſame manner, aſcending from fifth to fifth, and re-deſcending to the octave when we advance too much in ſharp: When we have reached ſol dieſis, we ſtop.

We then retake the firſt ut, and accord its ſharp octave; then the fifth flat of that octave fa, the ſharp of this fa; next the ſi B flat, fifth of this octave; laſtly, the mi B flat, fifth flat of this ſi B flat, the ſharp octave from which mi B flat ought to form a true fifth, or nearly ſo with the la B flat or ſol dieſis, precedently accorded. When this happens, the partition is juſt, otherwiſe it is falſe; and this happens from not having exactly followed the rules explained at the word Modification.

Partition for the Concord of the Organ and Harpſichord.



Vide the above ſucceſſion of concords which form the partition.

The partition being well formed, the remaining concord is very eaſy, ſince there is no longer any thing more than uniſons and octaves to finiſh the concordance of the whole keys.

PASSACAILLE. A kind of chacon, whoſe air is more tender and the movement ſlower than in the ordinary ones. (Vide Chacon.)

The paſſacaille's of Armeda and Iſa are celebrated in the French opera.

PASSAGE. An ornament by which a ſtroke of muſic is ornamented, in general rather ſhort, which is compoſed of ſeveral notes or diminutions, which are ſung or played very lightly. This is what the Italians call alſo paſſo. But every ſinger in Italy is obliged to underſtand the compoſition of the paſſi, whereas the generality of French ſingers never remove from the notes, and form only thoſe paſſages which are written for them.

PASSE PIED. The air of a dance of the ſame name, very common, whoſe meaſure is triple, is marked $\frac{3}{8}$, and beaten with one time. Its movement is more lively than that of the minuet; the character of the air ſomewhat ſimilar, except that the paſſe pied admits the ſyncope, and the minuet does not. The meaſure of each repriſe ought to enter in this manner, in an equal number. But the air of the paſſe pied, inſtead of beginning on the ſtroke of the meaſure, ſhould, in every repriſe, begin on the demi-crotchet which precedes it.

PASTORAL. A rural opera, whoſe perſonages are ſhepherds, and whoſe muſic ſhould be aſſorted to the ſimplicity of the taſte and manners ſuppoſed to them.

A paſtoral is alſo a piece of muſic formed on words relative to a paſtoral condition; or an air which imitates that of the ſhepherds, which has its ſweetneſs, tenderneſs, and nature: The air of a dance compoſed in the ſame character, is alſo called paſtoral.

PASTORELLA. An Italian air in the paſtoral genus. The French airs called paſtorals, are generally of two times, and in the character of the muſette. The Italian paſtorals have more accent, more grace, as much ſweetneſs, and leſs flatneſs. Their meaſure is always the 6—8th.

PATHETIC. A kind of dramatic and theatrical muſic, which tends towards the painting and touching the nobler paſſions, and more particularly grief and ſorrow. All the expreſſion in the French muſic, in the pathetic genus, conſiſts in trained and

and enforced ſounds, and in ſuch a ſlowneſs of movement, that all ſentiments of the meaſure are effaced. From thence it happens, that the French think every thing pathetic that is ſlow, and that all ſhould be ſlow that is *pathetic*. They even have airs which become gay and trifling, or tender and pathetic, according as they are ſung quick or ſlow. Such is an air ſo celebrated in Paris, to which the firſt character is given on theſe words, "Il "y a trente ans que mon cotillon trâine," &c. and the ſecond on theſe, "Quoi vous partez ſans que rien vous arrête," &c. This is the advantage of French melody, it ſerves for whatever we chuſe.—Fiet avis, & cum volet, arbor.

But the Italian muſic has not the ſame advantage: Each air, each melody has its character ſo appropriated, that it cannot be deprived of it. Its pathetic of accent and melody is felt in every kind of meaſure, and even in the moſt lively movements.

The French airs change their characters as the movement is preſſed or ſlackened. Each Italian air has its movement ſo determined, that it cannot be changed without overthrowing the melody. The air, thus disfigured, does not change its character, it loſes it: It is no longer an air; it is nothing in the character of the movement, neither can it be in the genus, in the mode, or in the harmony; ſince there are pieces equally pathetic in the three genera, in the two modes, and all imaginable harmony. The true pathetic is in the paſſionate accent, which is not determined by rules; but which the genus finds, and the heart feels, without the art being able to give its laws in any reſpects.

PAVANE. The air of an ancient dance of the ſame name, which has not been in uſe for ſome time. This name of pavane was given it becauſe the figurants formed, in looking at each other, a kind of tail after the manner of the peacock's. The man made uſe of his cape and ſword, which he uſed in this dance, and 'tis in alluſion to the vanity of this attitude that they have formed the reciprocal verb *ſe pavaner*.

PAUSE. An interval of time, which, in the execution, ought to paſs in ſilence by the part where the pauſe is marked. (Vide Silence.)

The name of pauſe may be applied to ſilences of different durations, but it is underſtood of a full meaſure. This pauſe is marked by a demi-bâton, which, leaving one of the interior lines of the ſtave, deſcends as far as the half of the ſpace compriſed between this line, and the line immediately below. When we have ſeveral pauſes to mark, we ſhould then make uſe of figures, which I have ſpoken of at the word *Reſt*.

In

In regard to the demi-pauſe, which is equal to a minum, or the half of a four-timed meaſure, it is marked as the entire pauſe, and with this difference, that the pauſe belongs to a line above, and that the demi-pauſe is below.

We muſt take notice, that the pauſe is always equal to a juſt meaſure, in whatever kind of meaſure it may be, whereas the demi-pauſe has a fixed and invariable power; ſo that, in every meaſure, which is ſuperior or inferior to a ſemi-breve, or two minums, we ought not to uſe the demi-pauſe to mark a demi-meaſure, but other ſilences which expreſs its juſt powers.

In regard to the other kind of pauſes known in our ancient muſic, under the name of *uſeleſs pauſes*, becauſe they were placed after the cleff, and which ſerved not to expreſs ſilences, but to determine the modes; this name of pauſes was given them only thro' error; for which reaſon I tranſmit the reader to the words Reſt and Mode, on that article.

TO PAUSE. To preſs on a ſyllable in ſinging: We ought not to pauſe but on long ſyllables, and never on the e mute.

PEAN. An air of victory amongſt the Greeks, in honour of the gods, and particularly of Apollo.

PENTACHORD. Was, amongſt the Greeks, ſometimes an inſtrument of five chords, and ſometimes an order or ſyſtem formed of five ſounds. It is in this laſt ſenſe, that the fifth, or diapente, was ſometimes called pentachord.

PENTATONON. Was, in ancient muſic, the name of an interval which we, at preſent, call ſuperfluous ſixth. (Vide Sixth.) It is compoſed of four tones, of a major ſemi-tone, and a minor; from whence it receives the name of pentatonon, which ſignifies five tones.

PERFECT. This word, in muſic, has ſeveral ſenſes. When joined to the word concord, it ſignifies a concord which comprehends all the conſonances without any diſſonance. When joined to *cadence*, it expreſſes that which bears the ſenſible note, and the dominant falls on the final. When joined to the word conſonance, it expreſſes a juſt and determined interval, which can neither be major or minor; ſo the octave, the fifth, and fourth, are perfect conſonances; and theſe are the only ones. When joined to mode, it is applied to the meaſure, by an acceptation which is no longer known, and muſt be explained for the underſtanding of the ancient authors. They divided the time or mode, in reference to the meaſure, into perfect and imperfect; and, pretending that the ternary number was more perfect than the binary, which they proved by the trinity, they called perfect time or mode, that whoſe meaſure was of three times; and they marked it by

an

an O or circle, ſometimes ſingle, and ſometimes barred Φ. The imperfect time, or mode, formed a meaſure of two times, and was marked by a divided O or C, ſometimes ſingle, and ſometimes barred. (Vide Meaſure, Mode, Prolation, Time.)

PERFIDIA. A term of the Italian muſic, which ſignifies a certain affectation of always doing the ſame thing, and always following the ſame deſign, preſerving the ſame movement, the ſame character of the air, the ſame paſſages, the ſame figures of the notes. (Vide Deſign, Air, Movement.) Such are the conſtrained baſſes, as thoſe of the ancient chacons, and an infinity of methods in conſtrained accompaniment, or perfidiato, which depend on the caprice of the compoſers.

This term is not uſed in France; and I don't know if it has ever been written in this ſenſe, otherwiſe than in Bropard's Dictionary.

PERIELESIS. A term of church-muſic. It is the interpoſition of one or more notes in the intonation of certain pieces of muſic, to aſſure their final, and ſpecify to the choir that it belongs to them to take and purſue what follows.

The perieleſis is otherwiſe called cadence, or ſmall neuma, and is formed three ways: viz. Firſt, by circumvolution; Secondly, by intercidence, or diatopſe; or Thirdly, by ſimple duplication. (Vide thoſe words.)

PERIPHERES. A term of the Greek muſic, which ſignifies a collection of notes, as well aſcending as falling, and which return, as it were, on themſelves. The peripheres was formed of the anacamptos and euthia.

PETTEIA. A Greek word which has nothing correſpondent to it in our language, and which is the name of the laſt of the three parts into which the melopœa is ſub-divided. (Vide Melopœa.)

The petteïa is, according to Ariſtides Quintilian, the art of diſcerning the ſounds which ought, or ought not, to be uſed, thoſe which ſhould be more or leſs frequent, and thoſe by which we ought to begin or finiſh.

It is the petteïa which conſtitutes the modes of muſic; it determines the compoſer in the choice of the genus of melody, relative to the movement which he would paint or excite in the ſoul, according to perſons or occaſions. In a word, the petteïa, a part of the hermoſmenon which regards the melody, is, in this reſpect, what the *mores* are in poetry.

We cannot ſee what moved the ancients to give it this name, unleſs they took it from πεττεία, their games at dice: the petteïa in muſic being a rule to combine and arrange the ſounds, as the game of dice is to arrange the pieces called πέττοι, *calculi*.

PHILÆLIA.

PHILÆLIA. Was a kind of hymn amongſt the Greeks, or ſong in honour of Apollo. (Vide Song.)

PHONIC. The art of treating and combining the ſounds on the principles of the acouſtic. (Vide Acouſtic.)

PHRASE. A continuance of an air or harmony, which forms, without interruption, a ſenſe more or leſs finiſhed, and which is terminated on a ſtop, by a cadence more or leſs perfect.

There are two kinds of muſical phraſes. In melody the phraſe is conſtituted by the air; that is, by a collection of ſounds ſo diſpoſed, whether in connection to the tone or movement, that they form the whole well united, which is reſolved on an eſſential chord of the mode in which we are.

In harmony, the phraſe is a regular continuance of concords all united together by diſſonances, expreſſed or underſtood, which is reſolved on an abſolute cadence: according as the ſenſe is more or leſs finiſhed, the ſtop alſo is more or leſs perfect.

It is in the invention of muſical phraſes, in their proportions, in their inter-mixture, that the real beauties of muſic conſiſt.

A compoſer, who punctuates and phraſes well, is a clever fellow; a ſinger, who feels, marks well his phraſes and their accent, is a man of taſte: but he who can only ſee, and render the notes, the tones, times, and intervals, without entering into the ſenſe of the phraſes, however ſure, however exact he may be, in every other reſpect, he is no more than a ſapſcull.

PHRYGIAN. The phrygian-mode is one of the four principal and moſt ancient modes of the Greek muſic. Its character was bold, lofty, impetuous, vehement, terrible: According to Athenæus alſo, the trumpets, and other military inſtruments, were founded on the phrygian mode.

This mode, invented, they ſay, by the Phrygian Marſyas, is placed in the middle, between the lydian and doric, and its final is at a tone diſtance from that of each.

PIECE. A work in muſic of a certain extent, ſometimes of a ſingle diviſion, ſometimes of ſeveral, forming a concinnity and a totality, formed to be executed together. So, an overture is a piece, tho' compoſed of three diviſions; and an opera itſelf is ſo, tho' divided by acts. But, beſides this general acceptation, the word piece was alſo a more peculiar one in inſtrumental muſic, and only for certain inſtruments, ſuch as the viol and harpſichord. For inſtance, we do not ſay, "A piece for the violin," but "*A ſonata*;" and we never ſay a ſonata for the harpſichord, but a piece.

PINCH. A kind of grace proper for certain inſtruments, and particularly the harpſichord; it is formed by ſtriking alternatively

the ſound of the written note, with the ſound of the inferior note, and obſerving to begin and finiſh by the note which bears the pinch. There is this difference between the pinch and trill, that the latter is ſtruck with the ſuperior note, and the pinch with the inferior. So the trill on ut is ſtruck on the ut and re; and the pinch on the ſame ut is ſtruck on the ut and fi. The pinch is marked, in the pieces of Couperin, with a ſmall croſs, very ſimilar to that with which the trill is marked in ordinary muſic. Vide the ſigns of the one and the other, at the head of that author's pieces.

TO PINCH. Is to uſe the fingers, inſtead of the bow, to make the chords of an inſtrument ſound. There are chord inſtruments which have no bow, and which are played only by pinching, ſuch as the lute, guittar, &c. but we alſo ſometimes pinch thoſe where we generally uſe the bow, as the violin and violincello; and this method of playing, almoſt unknown in the French muſic, is marked in the Italian by the word pizzicato.

PIZZICATO. This word, written in the Italian muſic, denotes that we muſt pinch. (Vide To Pinch.)

PLAGAL. A plagal tone or mode. When the octave is found arithmetically divided, according to the ordinary language, that is, when the fourth is in flat, and the fifth in ſharp, we ſay that the tone is plagal, to diſtinguiſh it from the authentic, where the fifth is in flat, and the fourth in ſharp.

Let us ſuppoſe the octave A a divided into two parts by the dominant E. If you modulate between theſe two la's, in the ſpace of an octave, and make your final on one of them, your mode is authentic. But if, modulating between theſe two la's, you make your final on the dominant mi, which is intermediary, or modulating from the dominant to its octave, you make the final on the intermediary tonic, in theſe two caſes the mode is plagal.

Here then is all the difference by which we ſee that all the tones are really authentic, and that the diſtinction is only in the diapaſon of the air, and in the choice of the note on which we ſtop, which is always the tonic in the authentic, and oftenеſt the dominant in the plagal.

The extent of the laws, and the diviſion of the parts, has made theſe diſtinctions diſappear in muſic, and they are no longer known but in that of the church. We count therein four plagal or collateral terms, viz. the ſecond, fourth, ſixth, and eighth, all thoſe whoſe number is equal. (Vide Tones of the Church.)

PLAY. The action of playing on an inſtrument. We ſay full play, demi play, according to the ſtronger or ſweeter manner of drawing the ſounds from an inſtrument.

TO PLAY. On inſtruments, is to execute airs of muſic on thoſe inſtruments, particularly thoſe proper to them, or airs noted for them. We ſay, To play on the violin, the baſs, the hautboy, the flute; To touch the harpſichord, the organ; To ſound the trumpet; To finger the guittar, &c. But an affectation of theſe peculiar terms, borders on pedantry. The term *to play* becomes general, and ſuits inſenſibly every kind of inſtrument.

PLICA. A kind of ligature in our ancient muſic. The plica was a ſign of heſitation, or ſlowneſs, (Signum moroſitatis, as Muris ſays). It was made by paſſing from one ſound to another, from the ſemi-tone to the fifth, whether in aſcending or falling, and there were four ſorts: Firſt, The plica long, and aſcending, is a quadrangular with a ſingle aſcendant ſtroke to the right, or with two ſtrokes, one of which on the right is the greateſt . Secondly, The long deſcending plica has two deſcendant ſtrokes, one of which on the right is the greater . Thirdly, The ſhort aſcendant plica has its ſtroke aſcending from the left, longer than that on the right . Fourthly, The deſcendant has the ſtroke deſcending from the left greater than that on the right .

POINT. This word, in muſic, ſignifies ſeveral different things.

There are, in our ancient muſic, ſix ſorts of points, viz. Point of perfection, point of imperfection, point of increaſing, point of diviſion, point of tranſlation, and point of alteration.

I. The point of perfection belongs to the ternary diviſion. It renders every note perfect, that is followed by another note, leſs by the half of its figure; then, by force of the intermediary point, the precedent note is equal to the triple inſtead of the double of that which follows.

II. The point of imperfection, placed on the left of the longue, diminiſhes its powers, ſometimes of a round, or ſemi-breve, ſometimes of two. In the firſt caſe, we place a ſemi-breve between the longue and the point; in the ſecond, we place two ſemi-breves at the right of two longues.

III. The point of increaſing belongs to the binary diviſion, and, between two equal notes, makes that ſuperior which precedes the double of that which follows.

IV. The point of diviſion is placed before a ſemi-breve, followed by a breve in the perfect time. It takes away a time from this breve, and makes it equal only to two ſemi-breves, inſtead of three.

V. If a ſemi-breve, between two points, ſhould be followed by two or more breves in imperfect time, the ſecond point tranſfers its ſignification to the laſt of theſe breves, renders it perfect, and makes its powers three times. This is the point of tranſlation.

VI. A point between two ſemi-breves, placed themſelves between two breves or ſquares in perfect time, takes a time from each of theſe breves, ſo that each breve is only equal to two ſemi-breves inſtead of three. This is the point of alteration.

This ſame point before a ſemi-breve, followed by two other ſemi-breves, between two breves or ſquares, doubles the powers of the laſt of theſe ſemi-breves.

As theſe ancient diviſions of time into perfect and imperfect, are no longer uſed in muſic, all theſe ſignifications of the point, which in reality are very confuſed, have been long aboliſhed.

At preſent, the point, taken as a power of the note, is always equal to the half of that which precedes it. So, after the ſemi-breve, the point is equal to a minum; after the minum, to a crotchet; after the crotchet, to a demi-crotchet, &c. But this method of fixing the powers of a point is not certainly the beſt that might be imagined, and often cauſes uſeleſs embarraſſments.

ORGAN or STOP POINT. Is a kind of point which I have ſpoken of at the word couronne. It is in relation to that kind of point that we generally call organ-points, thoſe kinds of muſic, meaſured or not meaſured, written or not, and all thoſe harmonic ſucceſſions which paſs on a ſingle note of the baſs always prolonged. (Vide Cadenza.)

When this ſame point, ſurmounted by a couronne, is written on the laſt note of an air, or a piece of muſic, it is then called final point.

Laſtly, there is another kind of point alſo, called detached points, which are placed immediately above or below the head of the notes: Several are generally placed together, and this ſhows that the notes thus pointed ſhould be marked by equal tones of the tongue, or bow, bold and detached.

TO POINT. Is, by means of the point, to render alternatively long and ſhort, the collection of notes naturally equal; ſuch, for inſtance, as a continuance of demi crotchets. To point them on the note, we add a point after the firſt; a double demi-crotchet on the ſecond; a point after the third; then a double crotchet; and ſo on. In this manner they keep, two by two, the ſame powers which they had before; but this power is unequally diſtributed between the two demi-crotchets, ſo that the firſt, or longue, has three quarters, and the ſecond or breve, the other quarter. To point them in the execution, we paſs them unequal,

qual, according to theſe ſame proportions, tho' they ſhould even be marked as equal.

In the Italian muſic, all the demi-crotchets are always equal, unleſs they are marked as pointed. But in the French muſic we do not make the demi-crotchets exactly equal but in the four timed meaſure. In all the reſt they are always pointed a little, unleſs it be written "Equal demi-crotchets."

POLYCEPHALE. A ſort of nome for the flutes, in honour of Apollo.

The polycephale nome was invented, according to ſome, by the ſecond Phrygian Olympus, and, according to others, by Crates, a diſciple of the ſame Olympus.

POLYMNASTIC. A name for flutes, invented, according to ſome, by a woman named Polymneſte; and, according to others, by Polymneſtus, ſon of Colophonian Meles.

POSITION. A part of the ſtave, where a note is placed to fix the degree of elevation of the ſound which it repreſents.

The notes, in connection with the lines, have only two different poſitions, viz. on a line, or in a ſpace; and theſe poſitions are always alternative when we move, or diatonically ſo. It is next the place which the line or ſpace fills, and in connection with the cleff, which determines the real poſition of the note in a general key.

We call alſo poſition in the meaſure, that time which is marked in beating, in lowering, or fixing the hand, and which is generally called the ſtroke. (Vide Theſis.)

Laſtly, we call poſition, in the playing of ſleeve-inſtruments, the place where the hand is placed on the ſleeve, according to the tone on which we play. When we have the hand at the height of the ſleeve againſt the finger board, ſo that the index is placed at a tone of the chord à jour, it is the natural poſition. When we looſen, we reckon the poſitions by diatonic degrees, which the hand is diſtant from on the finger board.

POWER OF THE NOTES. Beſides the poſition of the notes which marks its tone, they all have ſome determined figure, which marks its duration on time, that is, which determines the powers of the notes.

The invention of this is attributed to Jean de Muris, about the year 1330, for the Greeks had no other power of notes than the quantity of ſyllables, which alone muſt prove that they had no muſic purely inſtrumental. However, P. Merſenne, who had read the works of Muris, aſſures us that he ſaw nothing to confirm that opinion; and myſelf, after having read the greateſt part, have not been more lucky than himſelf. Moreover, the examination of manuſcripts, in the fourteenth age, which are in

the French king's library, does not perſuade us to judge that the different figures of notes, which are found therein, were of ſo new an inſtitution. Laſtly, it is difficult to be believed, that, during three hundred years and more, which have paſſed between Gui Aretin and Jean de Muris, the muſic ſhould have been entirely deprived of the rhyme and meaſure, which are its fire and principal beauty,

However it may be, it is certain, that the different powers of the notes are of very ancient invention. I find, in the earlieſt times, five ſorts of figures for them, without reckoning the ligature and point. Theſe five are the maximum, the longue, the breve, the ſemi-breve, and minime. See Plate A. Fig. I.

All theſe different notes are black in the manuſcript of Guillaume de Machault. It is only ſince the invention of painting, that they have thought of making them white, and adding new notes to diſtinguiſh the powers by the colour as well as the figure.

The notes, tho' figured the ſame, had not always the ſame equality. Sometimes the maximum was equal to two longues, or the longue to two breves; ſometimes it was equal to three: this depended on the mode. (Vide Mode.) It was the ſame thing with the breve, in connection with the ſemi-breve, and this depended on the time. (Vide Time.) Laſtly, it was ſimilar with the ſemi-breve, in connection with the minime, and this depended on the prolation. (Vide Prolation.)

There were then double longue, perfect longue, imperfect longue, perfect breve, changed breve, major ſemi-breve, and minor ſemi-breve: ſeven different powers, to which four figures only anſwer, without reckoning the maximum or minime, a note of more modern invention. (Vide theſe different words.) There were alſo ſeveral other methods of modifying the different powers of theſe notes, by the point, the ligature, and poſition of the tail. (Vide Ligature, Plica, Point.)

The figures which were added in the continuance of theſe five or ſix firſt, were the crotchet, the demi-crotchet, the triple, and even quadruple demi-crotchet, which would make eleven figures in all; but as ſoon as it was the cuſtom to ſeparate the meaſures by bars, all the figures of notes were abandoned, which were equal to ſeveral meaſures, as the maximum, which equalled eight; the longue equal to four; and the breve to two.

The ſemi-breve, which equals an entire meaſure, is the longeſt power of notes remaining in uſe, and on which all the powers of the other notes have been determined; and as the binary meaſure, which had paſſed a long time for leſs perfect than the ternary, took laſtly the treble, and ſerved as the baſs of all the other

other meaſures; ſo the ſub-double diviſion carried it on the ſub-triple, which had alſo paſſed as the moſt perfect: ſometimes the ſemi-breve was not equal to three minums, but two only; the minum two crotchets; the crotchets two demi-crotchets; and ſo on to the quadruple demi-crotchet; unleſs in the caſes of exception, where the ſub-diviſion has been preſerved, and expreſſed by the cypher 3 placed above or below the notes.

The ligatures were alſo aboliſhed at the ſame time, at leaſt in regard to the changes which they produced in the power of the notes. The tails, in whatever manner they are placed, had no more than a fixed ſenſe, and always the ſame; and laſtly, the ſignification of the point was alſo bounded by the half of the note, which is immediately before it. Such is the condition in which the figures of the notes have been placed, in regard to their powers, and where they actually are.

The equivalent ſilences are explained at the article *Silence*.

The author of the diſſertation on modern muſic, finds all this to be ill imagined. I have ſaid, at the word *Note*, ſome one of the reaſons which he alledges.

PRELUDE. A piece of ſymphony, which ſerves as an introduction and preparation to a piece of muſic. In which ſenſe, the overtures of the opera are preludes; as alſo the ritournels, which are very often at the beginning of ſcenes or monologues.

Prelude is alſo a ſtroke in ſinging, which paſſes thro' the principal chords of the tone, to announce it, to verify if the inſtrument is in tune, &c.

TO PRELUDE. Is, in general, to ſing or play ſome ſtroke of irregular fantaſy, rather ſhort, but paſſing by the eſſential chords of the tone, either to eſtabliſh or to diſpoſe the voice, or to place the hand well on an inſtrument before the beginning of a piece of muſic.

But on the organ and the harpſichord, the art of preluding is more conſiderable. It is to compoſe and play extempore pieces, filled with all that compoſition has moſt ingenious, in deſign, in fugue, in imitation, modulation, and harmony. It is chiefly in preluding, that great muſicians, exempted from that extreme ſlavery to rules, which the eye of the critic impoſes on them on paper, makes thoſe tranſitions ſhine which raviſh the ear of the audience. It is here that it is not ſufficient to be a good compoſer, or to poſſeſs one's key well, or even to have a good and well exerciſed hand: We muſt, moreover, abound in that fire of genius, and that inventive ingenuity, which find and execute inſtantly the ſubjects moſt favourable to harmony, and moſt flattering to the ear. It is by this grand art of preluding that excellent organiſts ſhine in France; ſuch as the Sieurs Claviere and

and Daquin, who were ſtill ſurpaſſed by Monſ. le Prince d'Ardore, ambaſſador of Naples, who, for vivacity of invention, and force of execution, eclipſes the moſt illuſtrious artiſts, and cauſes the admiration of connoiſſeurs at Paris.

PREPARATION. The act of preparing the diſſonance. (Vide To Prepare.)

TO PREPARE. To prepare a diſſonance, is to treat it in harmony, ſo that, by favour of that which precedes, it may be leſs rough to the ear than it would be without this precaution: According to this definition, every diſſonance muſt be prepared. But when, to prepare a diſſonance, we require that the ſound which forms it ſhould have made a conſonance before, in that caſe, there is fundamentally only one diſſonance which is prepared, viz. the ſeventh. This preparation, moreover, is not at all neceſſary in the ſenſible concord, becauſe then the diſſonance, being characteriſtic, and in concord and mode, is ſufficiently announced; the ear attends to it, admits it, and is neither deceived on the concord, or its natural progreſs. But when the ſeventh is heard on the fundamental ſound, which is not eſſential to the mode, we ought to prepare it to ſuit every equivocation, to hinder the ear of the audience from inattention; and as this concord of ſeventh is overthrown and combined in ſeveral methods, from thence alſo ariſe different methods, apparently of preparation, which at bottom, however, always return to the ſame.

We muſt conſider three things in the practice of diſſonances, viz. the concord which precedes the diſſonance, that wherein it is found, and that which follows it. The preparation regards only the two others. For the third, vide To Save.

When we would prepare a diſſonance regularly, we muſt chuſe to arrive at the concord, ſuch a continuance of the fundamental baſs, that the ſound, which forms the diſſonance, may be a prolongation in the ſtrong time of a conſonance, ſtruck on a weak time in the precedent concord, which we call to ſyncopate.

From this preparation reſult two advantages; viz. I. That there is neceſſarily an harmonic connection between the two concords, ſince the diſſonance itſelf forms that connection; and ſecondly, That this diſſonance, being only the prolongation of a conſonant ſound, becomes much leſs rough to the ear than it would be on a ſound freſh ſtruck. Herein, moreover, is all that is ſought in the preparation. (Vide Cadence, Diſſonance, Harmony.)

We ſee, by what I have juſt ſaid, that there is no part particularly deſtined in the preparation of the diſſonance, than that itſelf which makes it heard; ſo that if the treble ſounds the diſſonance,

diſſonance, it is dependant on it to ſyncopate; but if the diſſonance is in the baſs, the baſs muſt ſyncopate. Tho' there is nothing that can be more ſimple, the maſters of compoſition have terribly confuſed it. There are diſſonances never prepared, ſuch as the ſixth added: others which are prepared but ſeldom, ſuch as the diminiſhed ſeventh.

PRESTO, This word, written at the head of a piece of muſic, denotes the quickeſt and moſt animated of the five principal movements eſtabliſhed in the Italian muſic. Preſto ſignifies quick. Sometimes we expreſs a movement ſtill quicker by the ſuperlative preſtiſſimo.

TO PRICK NOTES. Is to write muſic with characters deſtined for that purpoſe, and which are called notes. (Vide Notes.)

There is, in the method of marking muſic, an elegance of copy, which conſiſts leſs in the beauty of the note, than in a certain exactneſs to place all the ſigns ſuitably, and which renders muſic, thus *marked*, much eaſier to execute; which has been explained at the word Copiſt.

PRIMA INTENZIONE. A technical Italian word, which has no correſpondent in French, and which wants none, ſince the idea which this word expreſſes is not known in the French muſic. An air, a piece *di prima intenzione*, is that which is formed on a ſudden, quite entire, and with all its parts in the mind of the compoſer, as Pallas came completely armed from the brain of Jupiter. The pieces, *di prima intenzione*, are ſuch uncommon ſtrokes of genius, all whoſe ideas are ſo narrowly united, that they form, as it were, only one alone, and cannot be preſented to the mind without the other. They are ſimilar to thoſe long periods of Cicero, tho' eloquent, the ſenſe of which ſuſpended during all their duration, is determined only at the laſt word, and which, conſequently, have formed only one ſingle thought in the mind of the author. There are, in arts, inventions produced by ſuch efforts of genius, and all the reaſonings of which, intimately united one with the other, cannot be formed ſucceſſively, but are neceſſarily offered to the mind, all at the ſame time, ſince the firſt, without the laſt, would form no ſenſe. Such is, for inſtance, the invention of that prodigious machine of the *Mætier a bas*, which may be looked on, ſays the philoſopher who has deſcribed it in the Encyclopœdia, as a ſingle and only reaſoning, the fabrication of whoſe work is the concluſion. Theſe kinds of operations of the underſtanding, which are difficultly explained, even by the analyſis, are prodigies for reaſon, and are only conceived by a genius capable of producing them: Its effect is always proportioned to the labours of the brain which they

have coſt; and, in muſic, the pieces di prima intenzione, are the only ones which can cauſe extaſies, delights, thoſe tranſports of the ſoul which convey the hearer from himſelf; we feel them, we enter into them at a moment; connoiſſeurs can never be deceived in them. At the end of one of theſe ſublime pieces, run through one of theſe extempore airs. All whoſe phraſes have been compoſed one after the other, or are only one phraſe changed into different tones, and whoſe accompaniment is only a collection made without labour, and with whatever taſte this laſt piece may be compoſed, if the remembrance of the other leaves you any attention to beſtow on it, it will be only to be frozen, as it were, and impatient for it. After an air di prima intenzione, every other muſic loſes its effect.

PROGRESSION. A continued proportion, prolonged beyond three times. (Vide Proportion.) The continuances of equal intervals are all in progreſſion, and it is in identifying the neighbouring terms of different progreſſions, that we are able to complete the diatonic and chromatic ſcale, by means of the modification. (Vide Modification.)

PROLATION. Is, in our ancient muſic, a method of determining the power of ſemi-breve notes on that of the breve, or of the minime's on that of the ſemi-breve. This prolation was marked after the cleff, and ſometimes after the ſign of the mode, by a circle or demi-circle, punctuated or not punctuated, according to the following rules.

Conſidering the ſub-triple diviſion always as the moſt perfect, the prolation was divided into perfect and imperfect, and each into major or minor, in the ſame manner as for the mode.

The perfect prolation was for the ternary meaſure, and was marked by a point in the circle when it was major, that is, when it denoted the connection of the breve to the ſemi-breve; or by a point in a demi-circle when it was minor, that is, when it expreſſed the connection of the ſemi-breve with the minime. See Fig. II. and Fig. III. Plate I.

The imperfect prolation was for the binary meaſure, and was marked as the time by a ſingle circle when major, or by a demi-circle when minor. See Fig. IV. and Fig. V. Plate I.

Some other ſigns have been ſince added to the perfect prolation. Beſides the circle and demi-circle, they made uſe of the cypher $\frac{3}{1}$ to expreſs the power of three ſemi-breves, for that of the breve, and of the cypher $\frac{3}{2}$, to expreſs the powers of three minums for the ſemi-breve.

At preſent, all prolations are aboliſhed. The ſub-double diviſion has gained the point over the ſub-ternary; and we muſt have recourſe to exceptions and particular ſigns, to expreſs the diviſion of any note into three others that are equal. (Vide Power of the Notes.)

We find, in the Academical Dictionary, that prolation ſignifies trill. I have never heard, or read, any where elſe, that this word had ſuch a ſenſe.

PROLOGUE. A kind of ſmaller opera, which precedes the greater, announces it, and ſerves as its introduction. As the ſubject of prologues is generally elevated, marvellous, magnificent, and full of praiſes, its muſic ſhould be brilliant, harmonious, and more tender than pathetic. We ought not to drain, in the prologue, the grand movements we would excite in the piece; and the muſician muſt, without being flat and tireſome in the delivery, ſtill know how to manage ſo as to ſhew himſelf intereſting and freſh in the body of the work. This gradation is neither felt, or rendered by the generality of compoſers, but it is ſtill neceſſary, tho' difficult. The beſt way would be, not to be in want of it, and to ſuppreſs entirely the prologues, which only tire and hurry the ſpectator, or injure the intereſt of the piece, by employing the methods of intereſting before-hand. The French opera's are the only ones, which have preſerved prologues: They, moreover, ſuffer them only becauſe they dare not murmur againſt the flatneſs which they contain.

TO PROLONG A SOUND. Is, in ſinging, to manage the voice, ſo that we may continue it a long time without taking breath. There are two methods of prolonging a ſound: the firſt, in ſuſtaining it always equally, which is generally done on lene's, and laboured accompaniment; the ſecond, in ſtrengthening it, which is more uſed in paſſages and trills. The firſt method requires more juſtneſs, and the Italians prefer it: the ſecond has more eclat, and pleaſes the French more.

PROPERLY. To ſing or play properly, is to execute the melody with the ornaments ſuitable to it. This melody being nothing by the force only of the ſounds, and having no character by itſelf, takes one only by the affected turnings given to it in its execution. Theſe turnings, taught by the maſters of the taſte in ſinging, are what are called the graces of the French muſic. (Vide Graces.)

PROPORTION. An equality between two connections. There are four kinds of connection, viz. the arithmetical, geometrical, harmonic, and counter-harmonic. We muſt have the idea of theſe different proportions to underſtand the calculations, with which authors have loaded the theory of muſic.

Let there be four times or quantities, a, b, c, d; if the difference of the firſt term a to the ſecond b, is equal to the difference of the third c to the fourth d, theſe four terms are in arithmetical proportion: ſuch are, for inſtance, the following numbers, 2, 4, 8, 10.

If, inſtead of having regard to the difference, we compare theſe terms by the method of containing, or being contained; if, for inſtance, the firſt a is to the ſecond b, as the third c is to the fourth d, the proportion is geometrical: ſuch is that which theſe four numbers form, 2, 4, 8, 16.

In the firſt example, the exceſs by which the firſt term 2 is ſurpaſſed by the ſecond 4, is 2; and the exceſs by which the third 8 is ſurpaſſed by the fourth 10, is alſo 2: theſe four terms are then in arithmetical proportion.

In the ſecond example, the firſt term 2 is the half of the ſecond 4; and the third term 8 is alſo the half of the fourth 16: theſe four terms are then in geometrica l proportion.

A proportion, whether arithmetical or geometrical, is called inverſe or reciprocal; when after having compared the firſt term with the ſecond, we do not compare the third with the fourth, as in direct proportion, but the fourth with the third, and the connection being thus taken, are found equal. Theſe four numbers, 2, 4, 8, 6, are in reciprocal arithmetical proportion; and theſe four, 2, 4, 6, 3, are in reciprocal geometrical proportion.

When, in a direct proportion, the ſecond term, or conſequence of the firſt connection, is equal to the firſt term, or antecedent of the ſecond counection, theſe two terms being equal, are taken for the ſame, and written only once inſtead of twice. So in this arithmetical proportion, 2, 4, 4, 6, inſtead of writing the number 4 twice, we write it but once, and the proportion is placed thus, ÷ 2, 4, 6.

In the ſame manner, in this geometrical proportion, 2, 4 :: 4, 8, inſtead of writing 4 twice, we write only one, in this manner, ∷ 2, 4, 8.

When the conſequence of the firſt connection ſerves as antecedent to the ſecond, and the proportion is placed in three times, this proportion is called thorough, becauſe, between the ſecond references which form it, there is no interruption found therein, when it is placed in four times.

Theſe three terms ÷ 2, 4, 6, are in thorough arithmetical proportion, and theſe other three ∷ 2, 4, 8, are in thorough geometrical proportion. When a thorough proportion is prolonged, that is, when it has more than three times, or two equal references, it is called progreſſion.

So theſe four terms, 2, 4, 6, 8, form an arithmetical progreſſion, which may be prolonged as much as we pleaſe, in adding the

the difference to the laſt term; and theſe four terms, 2, 4, 8, 16, form a geometrical progreſſion, which may be prolonged in the ſame manner, as much as we pleaſe, in doubling the laſt term, or in general, by multiplying it by the quotient of the ſecond term, divided by the firſt, which quotient is called the expoſition of the connection or progreſſion.

When three terms are ſuch as the firſt to the third, as the difference of the firſt to the ſecond is to the difference of the ſecond to the third, theſe three terms form a kind of proportion, called harmonic. Such are, for inſtance, theſe three numbers, 3, 4, 6; for as the firſt 3 is the half of the third 6; in the ſame manner the exceſs 1 of the ſecond on the firſt, is the half of the exceſs 2 of the third on the ſecond.

Laſtly, when three terms are ſuch, that the difference of the firſt to the ſecond is in the difference of the ſecond to the third, not as the firſt is to the third, as in harmonic proportion, but, on the contrary, as the third is to the firſt, then theſe three terms form together a kind of proportion, called counter harmonic proportion. So theſe three numbers, 3, 5, 6, are in counter harmonic proportion.

Experience has ſhewn, that the connections of three chords, ſounding the perfect major concord third together, formed between themſelves, the ſort of proportion which, on that account, was called harmonic; but this is a pure propriety of numbers, which has no affinity with the ſounds, or with their effect, on the auditive organ; ſo the harmonic and counter harmonic proportion belong no more to the art than arithmetical proportion, or the geometrical, which are even of much greater utility. We muſt always think, that the proprieties of abſtracted quantities are not proprieties of ſounds; and not ſeek, in imitation of Pythagoreans, ſome ſilly chimerical analogies between things of different natures, which have only connections of convention between them.

PROPRIETY. The execution of the air with the ornaments ſuitable to it, and which are called graces in ſinging. (Vide Graces.)

PROSLAMBANOMENOS. Was, in ancient muſic, the flatteſt ſound of all the ſyſtem, a tone below the hypate hypaton.

This name ſignifies ſuper-numerary, acquired or added, becauſe the chord which renders that ſound was added below all the tetrachords to continue the diapaſon, or the octave with the meſis; and the diapaſon or double octave, with the nete-hyperboleon, which was the ſharpeſt chord of all the ſyſtem. (Vide Syſtem.)

PROSODIAC. The proſodiac nome was ſung in honour of Mars, and was, they ſay, invented by Olympus.

PROSODY.

PROSODY. A kind of nome for flutes, and peculiar to the cantics which were ſung, amongſt the Greeks, at the entrance of ſacrifices. Plutarch attributes the invention of proſodies to Clonas, of Tegæa, according to the Arcadians, and Thebes, according to Boetius.

PROTESIS. The pauſe of a long time in ancient muſic, with the difference of the limma, which was the pauſe of a ſhort time.

PYTHAGOREANS. The name of one of the two ſects into which the Theoricians were divided in the Greek muſic: it took its name from Pythagoras, its chief, as the other ſect took its name from Ariſtoxenes.

The Pythagoreans fixed all the intervals, as well conſonant as diſſonant, by the calculation of connections. The Ariſtoxenians, on the contrary, ſaid that they appealed to the judgment of the ear. But, at bottom, their diſpute was only a diſpute of words; and under more ſimple denominations, the halves or fourths of the tone, amongſt the Ariſtoxenians, either ſignified nothing, or required no calculations leſs compoſed than thoſe of the limma, comma's, and apotomes, fixed by the Pythagoreans. In propoſing, for inſtance, to take the half of a tone, what did an Ariſtoxenian propoſe? Nothing on which the ear could place a fixt judgment. Either he knew not what he would ſay, or propoſed to find a medium proportionate between 8 and 9. This proportionate medium if the ſquare root of 72, and this ſquare root is an irrational number, there was no other poſſible method of aſſigning this half of the tone but by geometry; and this geometrical method was not more ſimple than the references, from number to number, calculated by the Pythagoreans. The ſimplicity of the Ariſtoxenians was only apparent; it was a ſimplicity ſimilar to that of the ſyſtem of Monſ. Boiſgelou, of which I ſhall ſpeak hereafter. (Vide Interval, Syſtem.)

# Q.

QUADRUPLE DEMI CROTCHET. A note of muſic, equal to the fourth of a demi-crotchet, or the half of a double demi-crotchet. Sixty-four quadruple demi-crotchets are neceſſary for a four timed meaſure; but a meaſure is ſeldom filled, or even a time, with that kind of note. (Vide Power of the Notes.)

The quadruple demi-crotchet is almoſt always united with other notes of equal or different powers, and is thus figured: or . It takes its name from four ſtrokes, or parentheſis's, which it bears.

QUANTITY. This word, in muſic as well as in proſody, does not ſignify the number of notes or ſyllables, but the relative duration which they ought to have. The quantity produces the rhyme, as the accent produces the intonation. From the rhyme and intonation reſults the melody. (Vide Melody.)

QUARREE or BREVE. A kind of note formed thus, . and which takes its name from its figure. In our ancient muſic, it was ſometimes equal to three ſemi-breves, and ſometimes two, accordingly as the prolation was perfect and imperfect. (Vide Prolation.)

The quarree, however, is always equal to two ſemi-breves, but it is very ſeldom uſed.

QUARTER OF A MINIME REST. A power of ſilence, which, in the Italian muſic, is figured thus, , in the French ; and which denotes, as its name expreſſes, the fourth part of a minime reſt, that is, the equivalent of a double demi-crotchet. (Vide Minime Reſt, Power of the Notes.)

QUARTER OF A TONE. An interval introduced into the enharmonic genus, by Ariſtoxenes, and whoſe computation is ſordato. (Vide Enharmonic, Scale, &c.)

We have neither in the ear, or in harmonic calculations, any principle which can furniſh us the exact interval of the quarter of a tone; and when we conſider what geometrical operations are neceſſary to determine it on the monochord, we are nearly tempted to ſuſpect that we have, perhaps, never toned, and never ſhall tone the quarter of a tone juſt, either by the voice, or any inſtrument.

The muſicians call alſo the quarter of a tone, the interval which from two notes at a tone from each other, is found between the B flat of the ſuperior, and the dieſis of the inferior.

an interval which the modification cauſes to vaniſh, but which the calculation may determine.

This fourth of a tone is of two kinds, viz. the major enharmonic, in the connection of 576 to 625, which is the complement of two ſemi-tones to the major tone; and the enharmonic minor, in the computation of 125 to 128, which is the complement of the two ſame ſemi-tones minor with the minor tone.

QUATUOR. This is the name given to pieces of vocal and inſtrumental muſic, which are of four reciting parts. (Vide Parts.) There are no true quatuors, or they are to no purpoſe. In a good quatuor, the parts muſt be almoſt always alternative, becauſe, in every concord, there are only two parts, at the moſt, which form an air, and which the ear can diſtinguiſh at the ſame time: the two others are only as a filling up; and we ought never to place any filling up in a quatuor.

QUINQUE. A name given to pieces of vocal and inſtrumental muſic, which are of five reciting parts. Since there is no true quatuor, for a much better reaſon, there is no veritable quinque. Each of theſe words, tho' paſſed from the Latin to the French, are pronounced as in Latin.

QUICK. In Italian Preſto. This word, at the head of an air, denotes the quickeſt of all the movements; and it has after it only its ſuperlative preſtiſſimo, or preſto aſſai, or very faſt.

---

# R.

RANZ DES VACHES. A celebrated air among the Swiſs, and which their young herdſman play on the bag-pipe, while they keep their herds on the mountains. (Vide Muſic.)

RAVALEMENT. The keys, or ſyſtem a ravalement, is that which, inſtead of being bounded by four octaves, as the ordinary key, is extended to five, adding a fifth below the ut, a fourth above it, and by this means comprehending five octaves between the two fa's. The word ravalement comes from the organ and harpſichord makers, and thoſe are the only inſtruments on which we can comprehend five octaves. The ſharp inſtruments paſs even the ut ſeldom above, without playing falſe; and the concord of the baſſes does not permit them to paſs the ut below.

RE. A ſyllable by which we ſol fa the ſecond note of the gamut. This note, in natural, is expreſſed by the letter D. (Vide D and Gamut.)

RECHERCHE.

RECHERCHE. A kind of prelude, or fantaſy on the organ or harpſichord, in which the muſician affects to ſearch for, and gather, the principal ſtrokes of harmony and muſic, which have been executed, or which are going ſo to be in a concert. This is ordinarily made immediately without preparation, and, conſequently, requires a great deal of ſkill.

The Italians call recherches, or cadences, thoſe arbitrii, or organ points, which the ſinger takes the liberty of making on certain notes of his part, ſuſpending his part, paſſing thro' the different chords of the mode, and even in going out ſometimes, according to the different ideas of his genius, and the turns of his throat, whilſt all the accompaniment ceaſes, till he thinks it proper to finiſh.

RECITAL. The general name of all that is ſung with a ſingle voice. We ſay, a recital of the baſs, a recital of counter-tenor. This word is applied, in this ſenſe, to inſtruments: We ſay, a recital of the violin, the flute, the hautboy. In a word, *to recite*, is to ſing or play alone on any part, in oppoſition to the choir, or ſymphony in general, wherein ſeveral ſing or play the ſame part in uniſon.

We may alſo call recital, the part wherein the principal ſubject reigns, and of which all the reſt are only the accompaniment. They have placed, in the Dictionary of the French Academy, "The recitals are not at all ſubject to the meaſure as the airs." A recital is often an air, and, conſequently, meaſured.—Quere, Can the Academy, perhaps, have confounded the recital with the recitative?

RECITING. A reciting part is that which is ſung by a ſingle voice, or played by a ſingle inſtrument, in oppoſition to the parts of ſymphony and chorus, which are executed in uniſon by ſeveral concertants. (Vide Recital.)

RECITATION. The action of reciting muſic. (Vide To Recite.)

TO RECITE. Is to ſing or play alone in muſic. To execute a recital. (Vide Recital.)

RECITATIVE. A diſcourſe recited in a muſical and harmonious tone. It is a method of ſinging which approaches nearly to ſpeech, a declamation in muſic, in which the muſician ſhould imitate, as much as poſſible, the inflexions of the declaiming voice. This air is called recitative, becauſe it is applied to narration, recital, and is uſed in the dramatic dialogue. They have placed in the Dictionary of the Academy, that the recitative ſhould be uttered diſtinctly: There are recitatives which ſhould be ſo, and others which ſhould be ſuſtained.

The perfection of the recitative depends much on the character of the language; the more the language is accented and melo-

dious, the more the recitative is natural, and draws near to real diſcourſe: it is only the accents marked in a language truly muſical; but in a heavy, flat, and unaccented language, the recitative is only notes, cries, pſalmody. The words are no longer diſcovered. Here, I think, is the only true principle, drawn from the nature of the thing, on which we ought to fix, to judge of the recitative, and compare that of one language to another, viz. that the beſt recitative is that wherein we ſing the leaſt.

Amongſt the Greeks, all their poetry was in recitative, becauſe, the language being melodious, it was ſufficient to add to it the cadence of the metre, and the ſuſtained recitation, to render this recitation entirely muſical; from whence it comes, that thoſe who verify call it ſinging. This cuſtom, having ridiculouſly paſſed into other languages, cauſes the poet to ſay, I ſing, when there is no ſinging in the caſe. The Greeks could ſing in ſpeaking; but amongſt us we muſt either ſing or ſpeak: we cannot do both at the ſame time. 'Tis this very diſtinction which has rendered the recitative neceſſary for us. The muſic predominates too much in our airs; the poetry is almoſt forgotten; our lyric dramas are too much ſung to be ſo always. An opera, which ſhould be only a collection of airs, would tire almoſt as much as a whole ſingle air of the ſame length. We muſt divide and ſeparate the airs by converſation; but this converſation ſhould be modified by muſic. The ideas ſhould change, but the language muſt continue the ſame. This language being once given, to change it in the courſe of a piece, would be to ſpeak half French, half German. The paſſage from diſcourſe to the air, and reciprocally, is too unequal. It diſguſts nature and the ear at the ſame time; true interlocution ſhould ſpeak or ſing; they cannot do alternatively one and the other. The recitative, moreover, is the method of union between the air and the words; it is that which ſeparates and diſtinguiſhes the airs; which quiets the ear, aſtoniſhed at what preceded; and diſpoſes it to taſte what follows. Laſtly, 'tis by aſſiſtance of the recitative, that what is only dialogue, recital, narration in the drama, may be rendered without going out of the given language, and without diſplacing the eloquence of the airs.

The recitative is not meaſured in ſinging. This meaſure, which characteriſes the airs, would ſpoil the reciting declamation. It is the accent, whether grammatical or oratorical, which ought alone to direct the ſlowneſs or rapidity of the ſounds; in the ſame manner alſo their elevation or lowering. The compoſer, in making the recitative on ſome determined meaſure, has nothing in view but to fix the correſpondence of the thorough baſs and muſic, and to denote, nearly, how the quantity of the ſyllables ſhould be mark'd, cadenc'd, and the verſes ſcann'd. The

Italians

Italians never make uſe, for their recitative, of any but the four-tim'd meaſure; but the French intermix their's of all ſorts of meaſures.

Theſe laſt number the cleff alſo with all kinds of tranſpoſitions, as well as for the recitative as for the airs, which the Italians do not; but they always mark the recitative in natural: The quantity of modulations with which they are loaded, and the promptitude of the tranſitions, cauſing that the tranſpoſition ſuitable to one tone is not ſo to thoſe in which it paſſes, would multiply the accidents on the ſame notes too much, and would render the recitative almoſt impoſſible to follow, and very difficult to be marked.

In effect, it is in the recitative that we ought to make uſe of the moſt laboured harmonic tranſitions, and the moſt ingenious modulations. The airs, offering only a ſentiment, and an image, encloſed, laſtly, within ſome unity of expreſſion, do not permit the compoſer to be diſtant from the principal tone; and if he wiſhed to modulate much in ſo ſhort a ſpace, he would offer only murdered phraſes, without union, taſte, or melody: A fault very common in the French and German muſic.

But in the recitative, where the expreſſions, the ſentiments, the ideas, vary every inſtant, we ought to make uſe of modulations equally varied, which may repreſent, by their contextures, the ſucceſſions expreſſed by the diſcourſe of the recitant. The inflexions of the ſpeaking voice are not bounded by muſical intervals. They are uncontrouled, and impoſſible to be determined. Not being able then to fix them with a certain preciſion, the muſician, to follow the words, ſhould, at leaſt, imitate them as much as poſſible; and for the purpoſe of conveying to the mind of the audience the idea of intervals and accents, which cannot be expreſſed in notes, he has recourſe to tranſitions which ſuppoſe them: If, for inſtance, the interval of the major or minor ſemi-tone is neceſſary, he will not mark them; he cannot: but he will give you the idea of them by the aſſiſtance of an enharmonic paſſage. A motion of the baſs is often ſufficient to change all the ideas, and to give the recitative that accent and inflexion, which the actor is unable to execute.

In regard to what remains, as it is neceſſary for the audience to be attentive to the recitative, and not the baſs, which ought to form its effect without being liſtened to, it thence follows, that the baſs ſhould continue in the ſame note as long as poſſible; for it is in the moment that its note changes, and it ſtrikes another chord, that it is attended to. Theſe moments being uncommon and well choſen, do not uſe any great effect; they remove the ſpectator leſs frequently, and leave him more eaſily

in the perſuaſion, that he hears ſpeaking only, tho' the harmony ſhould continually act on his ear. Nothing denotes a worſe recitative than theſe baſſes perpetually leaping, which run from demi-crotchet to demi-crotchet after this harmonic ſucceſſion, and form, under the melody of the voice, another kind of melody more flat and tireſome. The compoſer ſhould know the art of prolonging and varying his concords on the ſame note of the baſs, and change them only in the moment when the inflexion of the recitative, becoming more lively, receives greater effect by this change of baſs, and prevents the audience from taking notice of it.

The recitative ſhould ſerve only to unite the contexture of the drama, to ſeparate and give weight to the airs, to prevent the wearineſs which the continuance of a great noiſe would cauſe; but however eloquent the dialogue may be, however energic and ingenious the recitative may be, it ought to continue no longer than is neceſſary to its object, becauſe it is not in the recitative that the charm of muſic acts, and that the opera was inſtituted only to diſplay this charm. Moreover, it is in this that the error of the Italians lies, who, by the extreme length of their ſcenes, make an ill uſe of this recitative. However beautiful it may be in itſelf, it tires, becauſe it continues too long; and that it is only to hear the recitative that we go to the opera.

Demoſthenes ſpeaking the whole day, would tire in the end; but it would not thence follow, that Demoſthenes was a tireſome orator. Thoſe who ſay that the Italians find their recitative bad, ſay it very frankly; ſince, on the contrary, there is no part in muſic of which the connoiſſeurs make ſuch great account, and on which they are ſo difficult. It is even ſufficient to excel in this ſingle part, were we but middling in every other, to be raiſed in that country to the rank of the moſt illuſtrious artiſt, and the celebrated Porpora, was only immortaliſed by that method.

I add, that tho' we do not ſeek in general in the recitative for the ſame energy of expreſſion as in the airs, it is ſtill found ſometimes; and when it is found, it forms a greater effect than in the airs themſelves. There are good opera's, where ſome principal piece of recitative excites the admiration of connoiſſeurs, and an intereſt in the whole ſpectacle: The effect of theſe pieces ſhows ſufficiently that the fault imputed to the genus, lies only in the method of treating it.

Monſ. Tartini relates having heard, in 1714, at the opera-houſe in Ancona, a piece of recitative of one ſingle line, and without any accompaniment but the baſs, form a prodigious effect, not only on the profeſſors of the art, but on all the ſpectators. "It was, ſays he, at the beginning of the third act. At

"each

" each repreſentation, a profound ſilence amongſt the whole au-
" dience announced the approach of this terrible piece. The
" faces grew pale; they felt themſelves ſhiver; and they beheld
" each other with a kind of terror: It was neither tears nor
" groans; it was a certain ſenſation of rough and diſdainful
" rigour, which troubled the ſoul, confined the heart, and froze
" the blood." We ſhould tranſcribe the original paſſage: theſe effects are ſo little known on our theatre, that our language is almoſt incapable of expreſſing them.

L'Anno quatordecimo del Secolo preſente nel dramma che ſi repreſentava in Ancona, v'era ſu'l principio dell' Attoterzo una riga di recitativo non accompagnato da altri ſtromenti che dal baſſo: per cui, tanto in noi profeſſori, quanto negli aſcoltanti, ſi deſtava una tal e tanta commozione di animo, che tutti ſi guardavano in faccia l'un l'altro, per la evidente mutazione di colore che ſi faceva in ciaſcheduno di noi. L'Effetto non era di pianto (mi recordo beniſſimo che le parole erano di ſdegno); ma di un certo rigore e freddo nel ſangue, che di fatto turbava l'animo. Tredeci volte ſi recito il dramma, e ſempre ſegui l'effeto ſteſſo univerſalmente: di che era ſegno palpabile il ſommo previo ſdenzio, con cui l'uditorio tutto ſi apparecchiava a goderne l'effetto.

RECITATIVE ACCOMPANIED. Is that to which, beſides the thorough baſs, is added an accompaniment of violins. This accompaniment, which cannot by any means be ſyllabic, together with the rapidity of the utterance, is generally formed of long notes ſuſtained on entire meaſures; and we write, for this purpoſe, on all the parts of the ſymphony, the word ſoſtenuto, chiefly in the baſs, which, without that, would ſtrike only flat and detached ſtrokes at each change of the note, as in the ordinary recitative; whereas we muſt, in that caſe, prolong and ſuſtain the ſounds, the whole power of the notes. When the accompaniment is meaſured, this obliges us to meaſure the recitative, which then follows and accompanies in ſome kind of accompaniment.

RECITATIVE MEASUR'D. Theſe two words are contradictory. Every recitative, wherein we find any other meaſure than that of the verſes, is no longer recitative. But an ordinary recitative is often changed on a ſudden in muſic, and takes from meaſure and melody, whatever is marked in writing on the parts a tempo, or a battuta. This contraſt, this well managed change, produces ſurpriſing effects. In the courſe of a recitative, a tender and plaintive reflexion takes the muſical accent, and is diſplayed inſtantly by the ſweeteſt inflexions of the muſic; then, being cut in the ſame manner by ſome other lively and impetuous reflexion, it is roughly interrupted to take, at a moment, the whole utter-

ance

ance of the words. Theſe ſhort and meaſured pieces, accompanied, in general, with flutes and horns, are not uncommon in grand Italian recitatives.

The recitative is alſo meaſured when the accompaniment with which it is charged, being tuneful and meaſured itſelf, obliges the recitant to conform his voice to it. It is leſs than a meaſured recitative, than, as I have ſaid above, a recitative accompanying the accompaniment.

RECITATIVE CONFIN'D. Is that which, being intermixt with rittornels and ſtrokes of ſymphony, confines, as it were, the recitant and orcheſtra, one towards the other, ſo that they ought to be attentive in a mutual degree. Theſe alternative paſſages of recitative and melody, clothed with all the eclat of the orcheſtra, are the moſt touching, moſt raviſhing, and moſt energic parts of the modern meaſure. The actor agitated, tranſported with a paſſion which does not ſuffer him to go through his ſpeech, is interrupted, breaks off, makes a ſtop, during which time the orcheſtra ſpeaks for him; and theſe ſilences, thus filled, affect the audience infinitely more than if the actor himſelf ſpoke all that the muſic makes them underſtand. Thus far, the French muſic has not been able to make any uſe of the confined recitative. They have endeavoured to give ſome idea of it in a ſcene, *Du Devin du Village*; and it appears, that the public has found, that a ſituation, when lively and thus managed, became much more intereſting. What would not the confined recitative do in grand and pathetic ſcenes, if ſo great an acquiſition can be drawn from it in a ruſtic and jocular genus.

RECLAME or CATCH WORD. Is, in church-muſic, that part of the anſwer which is re-begun after the verſe. (Vide Anſwer.)

REDOUBLED. We call a redoubled interval, every ſimple interval carried in its octave. So the thirteenth, compoſed of a ſixth and octave, is a redoubled ſixth; and the fifteenth, which is an octave added to the octave, is a redoubled octave. When, inſtead of an octave, we add two, the interval is triple; and quadruple when three are added.

Every interval, whoſe name paſſes ſeven in number, is always at leaſt redoubled. To find the ſimple of any redoubled interval, throw out ſeven as often as you can from the name of this interval, and the remainder will be the name of the ſimple interval. From thirteen throw out ſeven, ſix remains; ſo the thirteenth is a redoubled ſixth. From fifteen take away twice ſeven, or fourteen, one remains; ſo the fifteenth is a tripled uniſon or doubled octave.

Reciprocally,

Reciprocally, to redouble any ſimple interval, add to it ſeven, and you will have the name of the ſame redoubled interval. To triple a ſimple interval, add to it fourteen. (Vide Interval.)

REDUCTION. A collection of notes diatonically deſcending. The term, as well as its contrary deduction, is no longer uſed but in church-muſic.

RELATION. A connection which the two ſounds that form an interval have with one another, conſidered by the genus of that interval. The relation is juſt when the interval is juſt, major or minor: it is falſe, whether ſuperfluous or diminiſhed. (Vide Interval.)

Amongſt falſe relations, we conſider as ſuch in harmony, thoſe only whoſe two ſounds cannot enter into the ſame mode. So the triton, which in melody is a falſe relation, is not ſo in harmony but when one of the ſounds which form it is a chord unknown to the mode. The diminiſhed fourth, tho' baniſhed from harmony, is not always a falſe relation. The diminiſhed and ſuperfluous octaves, being not only intervals baniſhed from harmony, but alſo impracticable in the mode, are always falſe relations. It is the ſame thing with the diminiſhed and ſuperfluous thirds and ſixths, tho' the laſt be admitted at preſent.

In former times falſe relations were forbidden; at preſent, they are almoſt all permitted in melody, but not in harmony. We may, however, make them underſtood, provided that one of the two ſounds, which form a falſe relation, be not admitted as a note of taſte, and not as the conſtitutive part of the concord.

We call alſo enharmonic relation, between two chords which are at a tone of interval, the connection which is found between the dieſis of the inferior, and that of the ſuperior. It is by the modification, the ſame touch on the organ and harpſichord; but in rigour, it is not the ſame ſound, and there is between them an enharmonic interval. (Vide Enharmonic.)

REMISS. Remiſs ſounds are thoſe which have little ſtrength, thoſe which, being very flat, cannot be rendered but by very looſe chords, or heard very near. Remiſs is oppoſed to intenſe; and there is this difference between remiſs and weak, in the ſame manner as between intenſe and ſtrong, that low and high are ſaid of the ſenſation which the ſound conveys to the ear, whereas intenſe and remiſs are rather connected with the cauſe that produces it.

RENVOI. A ſign figured at will, placed commonly above the ſtave, which correſponding with another ſimilar ſign, marks that we muſt, whence is the ſecond, return where the firſt is, and from thence follow until we find the final point. (Vide Point.)

REPERCUSSION. A frequent repetition of the ſame ſounds, This is what happens in every modulation well determined; where the eſſential chords of the mode, thoſe which compoſe the harmonic triad, ſhould be reſtruck oftener than any of the reſt. Amongſt the three chords of this triad, the two extremes, that is, the final and dominant, which are properly the repercuſſion of the tone, ſhould be oftener ſtruck than that of the middle, which is only the repercuſſion of the mode.

REPETITION. An eſſay particularly made of a piece of muſic, which is to be executed in public. Repetitions are neceſſary to certify that the copies are exact, that the actors may foreſee their parts, that they may concert together and accord, that they may expreſs the ſpirit of the work, and render faithfully what they have to ſpecify. Repetitions ſerve the compoſer alſo to judge of the effect of his piece, and make the changes it may want.

REPLIQUE. This term in muſic ſignifies the ſame thing as the octave. (Vide Octave.) Sometimes, in compoſition, the uniſon of the ſame note is alſo called replique, in two different parts.

There are neceſſarily repliques in each concord, throughout the whole of muſic of more than four parts. (Vide Uniſon.)

REPEAT. Every part of an air which is repeated twice is called by this term. It is in this ſenſe that we ſay the firſt repeat of an overture is flat, and the ſecond gay. Sometimes alſo, by repeat, we underſtand only the ſecond part of an air. We ſay alſo, that the repeat of Dardanus's beautiful minuet is worth nothing. Laſtly, repeat is alſo each of the parts of a rondeau, which has often three, and ſometimes more, the firſt of which only is repeated.

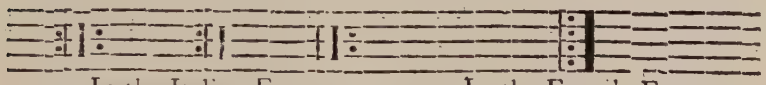
In notes we call repeat a ſign, which marks that the part of the air which precedes it ſhould be repeated, which prevents the trouble of writing it twice. In this ſenſe, we diſtinguiſh two repeats, the greater and ſmaller. The greater repeat is figured in the Italian manner, by a double perpendicular bar, with two points beyond each ſide; or in the French, by two perpendicular bars, a little more diſtant, which traverſe the whole ſtave, and between which a point is placed in each ſpace; but this ſecond method is gradually aboliſhed: for, not being able to imitate the Italian muſic entirely, we, at leaſt, take the words and ſigns; as thoſe youths who think they follow Voltaire's ſtyle by imitating his orthography.

This repeat, thus punctuated on the right and left, generally denotes, that we muſt begin again twice, as well the part which precedes

precedes as that which follows, for which reaſon, it is generally found near the middle of paſſe pieds, minuets, gavots, &c.

When the repeat has points on the left only, it is for the repetition of that which precedes; and when on the right, it is for the repetition of what follows. It would be at leaſt to be wiſhed, that this convention, adopted by ſome, was entirely eſtabliſhed, for it appears to me very convenient. Vide the form of theſe different repeats.

REPEATS.

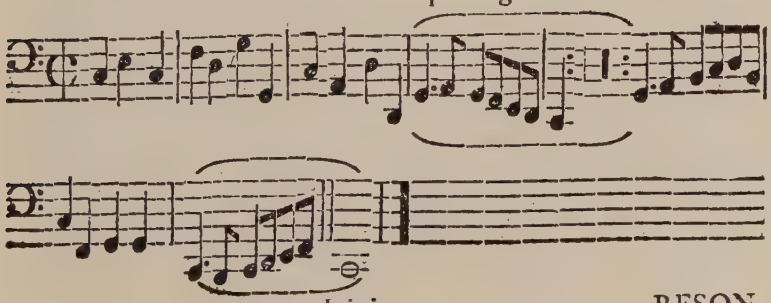


In the Italian Form. In the French Form.

The ſmaller repeat is, when after a greater repeat we begin ſome others of the laſt meaſures before we finiſh. There are no peculiar ſigns to the ſmaller repeat, but we commonly uſe ſome ſign of the Renvoi figured above the ſtave. (Vide Renvoi.)

We muſt take notice, that thoſe who mark correctly always take care that the laſt note of a repeat be exactly connected for the meaſure, both to that which begins the ſame repeat, and to that which begins the following, when there is one. If the reference of theſe notes does not exactly fill the meaſure, after the note which terminates a repeat, we add two or three notes of that which ought to be re-begun, until we have ſufficiently ſpecified how the meaſure is to be filled. Moreover, as at the end of a firſt part, we have firſt the firſt part to repeat, then the ſecond part to begin; and as that is not always done in times, or ſimilar parts of times, we are often obliged to mark the final of the firſt repeat twice; one before the ſign of repeat, with the firſt notes of the firſt part; the other, after the ſame ſign, to begin the ſecond part. We then draw a chapeau or half-circle after that firſt final until its repetition, to denote that the ſecond time we muſt paſs, as null, all that is compriſed under the demi-circle. I cannot render this explanation more clear, ſhorter, or more exact, but the following method will ſhow it more perfectly.

Method of Repeating.



RESONNANCE. A prolongation or reflection of the ſound, whether by the continued vibrations of the chords of an inſtrument, or by the tinkling of a ſonorous body, or the colliſion of the air encloſed in a wind inſtrument. (Vide Sound, Muſic, Inſtrument.)

Elliptic and parabolic vaults reſound; that is, reflect the ſound. (Vide Echo.)

According to Monſ. Dodart, the noſe, mouth, and its parts, as the palate, the tongue, the teeth, the lips, have no connection with the tone of the voice; but their effect is very great in reſonnance. (Vide Voice.)

A very ſenſible example is drawn from a maple inſtrument, called guimbard, which, if we hold it with the fingers, and ſtrike on the languette or tongue, will give no ſound; but, if holding it between the teeth, we do the ſame, it will render a ſound, which is varied by confining it more or leſs, and is heard very far, particularly in the baſs.

In chord inſtruments, ſuch as the harpſichord, the violin, the violincello, the ſound comes from the chord only; but the reſonnance depends on the caſe of the inſtrument.

RESPONSE. A kind of redoubled ancient, which is ſung in the Roman Church after the morning leſſon, and which finiſhes in the method of a rondeau by a repeat, called reclame.

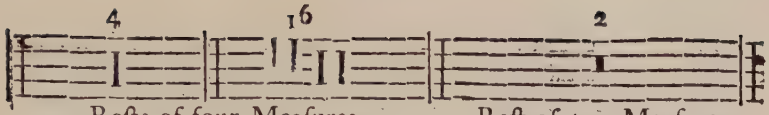
The air of the reſponſe ought to be more ornamented than that of an ordinary ancient, without, however, going out of the flat melody, or of that of the mode which we have choſen. It is not, however, neceſſary for the verſe of a reſponſe to be terminated by the final note of the mode: It is ſufficient that this final terminates the reſponſe itſelf.

RESPONSE. Is alſo, in a fugue, the entrance of the ſubject by another part, after the firſt has made it to be heard; but it is particularly in a counter fugue, the entrance of the ſubject varied from that which has been juſt heard. (Vide Fugue, Counter Fugue.)

REST. A kind of thick bar which perpendicularly traverſes one or more lines of the ſtave, and which, according to the number of lines which it comprehends, expreſſes a greater or ſmaller quantity of meaſures, which ought to be paſſed in ſilence.

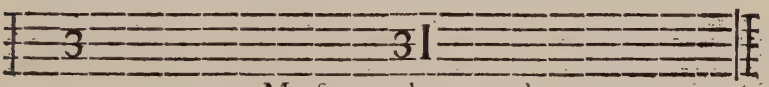
Anciently there were as many kinds of reſts as different powers of the notes, from the ſemi-breve, which is equal to a meaſure, to the maximum, which equals eight, and whoſe duration, in ſilence, was empowered by a reſt, which, going of from one line, traverſed three ſpaces, and joined the fourth line.

At preſent, the greateſt reſt is of four meaſures. This reſt, going off from one line, traverſes the following, and is joined to the third.




Reſts of four Meaſures. Reſt of two Meaſures.

It is repeated once, twice, or as many times as are neceſſary to expreſs eight meaſures, or twelve, or every other multiple of four; and we generally add a cypher, which diſpenſes with calculating the powers of all theſe reſts. So the ſigns covered by the cypher 16, in the above plate, denote a ſilence of ſixteen meaſures. I do not ſee very clearly the great utility of a double ſign to the ſame thing. So the Italians, to whom a greater practice of muſic always ſuggeſts the firſt methods of abridging its ſigns, begin to ſuppreſs reſts; in the place of which they ſubſtitute the cypher which expreſſes the number of meaſures to be counted. But an attention, which we muſt have in that caſe, is not to confound theſe cyphers in the ſtave with other ſimilar cyphers, which may mark the ſpace of the meaſure we make uſe of.




31 Meaſures to be counted.

So, in the above figure, we muſt take care to diſtinguiſh the ſign of three times from that with the number of pauſes to be counted, for fear, that inſtead of 31 meaſures or pauſes, we ſhould reckon 331.

The ſmalleſt reſt is of two meaſures, and traverſing a ſingle ſpace is only extended to the line neareſt to it,

The other leſs ſilences, as a meaſure, half meaſure, time, demi-time, &c. are expreſſed by the words pauſe, demi-pauſe, &c. (Vide thoſe words.)

It is eaſy to underſtand, that in combining all theſe ſigns, we may expreſs, at pleaſure, ſilences of any duration.

We muſt not confound, with reſts of ſilences, other reſts preciſely of the ſame figure, which, under the name of initial pauſes, ſerved in our ancient muſic to announce the mode, that is, the meaſure, which I have have ſpoken of at the word Mode.

RHYME. Is, in its moſt general definition, the proportion that the parts of a whole have between each other. It is, in muſic, the difference which reſults from quickneſs or ſlowneſs, length or brevity of the times.

Ariſtides Quintilian divides the rhyme into three kinds, viz. the rhyme of immoveable bodies, which reſults from the juſt pro-

portion of their parts, as in a well made ſtatue; the rhyme of local movement, as in dancing, the walk well compoſed, and the attitudes of pantomimes; and the rhyme in movements of the voice, or relative duration of ſounds, in ſuch a proportion, that, whether we always ſtrike the ſame chord, or vary the ſounds from ſharp to flat, we always make agreeable effects reſult from their ſucceſſion in their duration and quantity. This laſt kind of rhyme is the only one which I ſhall here ſpeak of.

The rhyme applied to the voice may be underſtood either of words or muſic. In the firſt ſenſe, it is from the rhyme, that the number and harmony of eloquence ariſe; the meaſure and cadence of poetry: in the ſecond, the rhyme is properly applied to the power of notes, and is now called meaſure. (Vide Meaſure.)

It is alſo to this ſecond acceptation that I ſhould confine what I have to ſay here on the rhyme of the ancients.

As the ſyllables of the Greek language had quantity and more ſenſible powers, as well as more determined than thoſe of our language; and as the verſes which were ſung were compoſed of a certain number of feet, which theſe ſyllables formed long or ſhort, differently combined, the rhyme of the muſic regularly followed the movement of thoſe feet, and was properly its expreſſion. It was divided as well as thoſe into two times, the one ſtruck, the other raiſed. They counted three genera, ſometimes four, and more, according to the different connections of the time. Theſe genera were *the equal*, which was alſo called dactylic, wherein the rhyme was divided into two equal times: The double, trochaïe or Iambic, in which the duration of one of the two times was double to that of the other. The ſeſquialter, which was alſo called peonic, whoſe duration, in one of the two times, was to that of the other in numerical powers as 3 to 2; and laſtly, the epitrite, leſs uſed, where the connection of the two times was as 3 to 4.

The times of theſe rhymes were ſuſceptible of more or leſs ſlowneſs, by a greater or leſs number of ſyllables, or long and ſhort notes, according to the movement; and in this ſenſe, a time might receive as far as eight different degrees of movement by the number of ſyllables which compoſed it; but the two times always preſerved together the connection determined by the genus of the rhyme.

Beſides that, the movement and motion of the ſyllables, and, conſequently, of the times and rhyme which reſulted from them, were ſuſceptible of acceleration and ſlackening, at the pleaſure of the poet, according to the expreſſion of the words and character of the paſſions which were to be expreſſed. So from theſe two meaſures combined together, aroſe a quantity of poſſible modifications

difications in the movement of a ſame rhyme, which had no other bounds than thoſe above or below, which the ear was not of an extent to perceive their proportions.

The rhyme, in reference to the feet which entered into poetry, was divided into three other genera. The ſimple, which admitted only one kind of feet; the compoſed, which reſulted from two or more kinds of feet; and the mixt, which might be reſolved into two or more rhymes, equal or unequal, according to the different combinations of which it is ſuſceptible.

Another ſource of variety in the rhyme was the difference of the movements or ſucceſſions of this ſame rhyme, according to the inter-mixture of the different verſes. The rhyme might be always uniform; that is, be ſtruck by two times always equal, as in the hexameter, pentameter, adonian, and anapeſtic verſes, &c. or always unequal, as in the pure iambic verſes; or diverſified, that is mixed with equal and unequal feet, as in the ſcazons, choriambics, &c. But in all theſe caſes, the rhymes, even ſimilar or equal, might, as I have ſaid, be very different in quickneſs, according to the nature of the feet. So of two rhymes of the ſame genus, reſulting one from two ſpondees, the other from two pyrrhics, the firſt would be double to the other in duration.

Silences were alſo found in the ancient rhyme, not in truth, as ours to make only ſome one of the parts be ſilent, or to give certain characters to the muſic, but only to fill the meaſure of theſe verſes called catalectics, which wanted a ſyllable; ſo the ſilence never could be found but at the end of the verſe to ſupply that ſyllable.

In regard to Lene's, they knew them without doubt, ſince they had a word to expreſs them. Its practice, however, muſt have been very uncommon amongſt them; at leaſt this may be inferred by the nature of their rhyme, which was only the expreſſion of the harmony, and of the harmony of the verſes. Neither does it appear that they practiſed trills and ſyncopes, or the points, unleſs the inſtruments formed ſomething ſimilar in accompanying the voice, of which we have no *Indice*.

Voſſius, in his book De Poematum Cantis & Veribus, raiſes the ancient rhyme greatly, and attributes to it all the force of the ancient muſic. He ſays, that a rhyme detached as ours, which repreſents no image of things, can have no effect, and that the ancient poetic numbers had been invented only for the very end that we neglect. He adds, that language and modern poetry are little ſuitable to muſic; and that we ſhall never have good vocal muſic till we make verſes favourable to the air; that is, till we confine our language, and give it, after the example of the ancients, the quantity and meaſured feet, by proſcribing for ever the barbarous invention of the rhyme.

Our verſes, ſays he, are preciſely as if they had only one ſingle foot; ſo that we have no veritable rhyme in our poetry: and, in fabricating our verſes, we only take care to introduce a certain number of ſyllables, without ſcarcely taking notice of what nature they are. Surely this is not a fit compoſition for muſic.

The rhyme is an eſſential part of muſic, and particularly in the imitative. The melody is nothing without it; and by itſelf it is ſomething, as we find by the effect of drums. But whence comes the impreſſion which the meaſure and cadence occaſion on us? What is the principle by which theſe returns, ſometimes equal, and ſometimes varied, affect our ſouls, and may convey to them the ſentiment of the paſſions? Enquire of the metaphyſician. All that we can ſay hereon is, that as the melody takes its character from the accents of the language, the rhyme draws its own from that of the proſody, and in that caſe it acts as an image of the words; to which we will add, that certain paſſions have naturally a rhymic character, as well as a melodious one, abſolute, and independant of the language, as ſorrow, which moves by ſlow and equal paces, as well as by low and ſlackened tones; joy, by lively and quick tones, as well as by ſharp and intenſe tones; from whence, I preſume, that we might obſerve in all the other paſſions, a peculiar character, but more difficult to catch, becauſe the generality of theſe other paſſions being compoſed, partake more or leſs of precedents, as well as from each other.

RHYMIC. A part of the art of muſic, which taught the practice of rules of movement and rhyme, according to the laws of the rhymopæa.

The rhymic, to ſpeak a little more in detail, conſiſts in knowing how to chuſe, between the three modes eſtabliſhed by the rhymopæa, the moſt ſuitable to the character in queſtion; to know and poſſeſs all kinds of rhymes in their foundation; to diſcern and make uſe of the moſt ſuitable on each occaſion; to intermix them at the ſame time in the moſt expreſſive and agreeable method; and laſtly, to diſtinguiſh the arſis and theſis, by the moſt ſenſible and beſt cadenced movement.

RHYMOPÆA. A part of the muſical ſcience, which preſcribed to the rhymic art, the laws of rhyme, and of all that belongs to it. (Vide Rhyme.) The rhymopæa was to the rhymic what the melopæa was to melody.

The rhymopæa had for its object the movement, or the time whoſe meaſure it denoted, diviſions, order, and mixture, whether to move the paſſions, to change them, or to calm them. It comprehends alſo the ſcience of mute movements, called orcheſis, and in general of all the regular movements. But it was principally connected with poetry, becauſe then poetry alone regulated the movements

movements of muſic, and as there was no muſic purely inſtrumental which had an independant rhyme.

We know that the rhymopœa was divided into three principal modes or tropes, the one low and confined, another raiſed and great, and the middle tranquil and peaceable; but, beſides, the ancients have left us nothing but very general precepts on this part of their muſic; and what they have ſaid of it has its connection always to the verſes and words deſtined for the muſic.

RIGADOON. A kind of dance, the air of which is ſtruck in two times, of a lively movement; and is generally divided into two repeats, phraſed from four to four meaſures, and beginning by the laſt note of the ſecond time.

I have heard ſay, by a dancing-maſter, that the name of this dance was derived from that of the inventor, who was called Rigaud.

RIPPIENO. An Italian word, which is frequently found in church-muſic, and is ſimilar to the word Chorus.

RITTORNEL. A ſtroke of ſymphony which is uſed after the manner of prelude to a head of the air, by which the air is ordinarily announced; or, at the end, to imitate and certify the end of the ſame air; or, in the middle, to repoſe the voice, to ſtrengthen the expreſſion, or ſimply to embelliſh the piece.

In recueils or partitions of ancient Italian muſic, the rittornels are often deſigned by the words ſi ſuona, which ſignifies that the inſtrument which accompanies ſhould repeat what the voice has ſung.

Rittornel comes from the Italian Rittornello, and ſignifies a ſmall return. At preſent, that ſymphony has taken a more brilliant character, and almoſt independant of the vocal, we pay no more attention to ſimple repetitions. Wherefore the word rittornel has grown obſolete.

ROLL. The ſeparated paper which contains the muſic that a concertant ought to execute, and is called part in a concert, but roll in an opera. Wherefore, we ought to diſtribute a part to each muſician, and a roll to every actor.

ROMANCE. An air on which we ſing a ſmall poem of the ſame name, divided by couplets, whoſe ſubject is generally ſome amorous, and often tragic hiſtory. As the romance ſhould be written in a ſimple touching ſtyle, and a rather antique taſte, the air ought to anſwer to the character of the words: No ornaments; a ſweet, natural, rural melody, which may produce its effect by itſelf, independantly of the method of ſinging it. It is not neceſſary that the air ſhould be ſtriking; it is ſufficient that it is lively, that it does not over-ſhadow the words, that it makes them very clearly be heard, and requires not too great an extent of voice. A well compoſed romance which has nothing ſoaring,

does not immediately affect; but each couplet adds ſomething to the effect of the preceding; the intereſt augments inſenſibly, and we find ourſelves ſometimes melted into tears, without being able to diſcover the charm which has produced that effect. It is a certain experience, that every accompaniment of inſtruments weakens this impreſſion. For the air of a romance, we require only a juſt, clear voice, which pronounces well and ſings with ſimplicity.

ROMANESQUE. An air for dancing.

RONDEAU. A kind of air with two or more repeats, and whoſe form is ſuch, that after having finiſhed the ſecond repeat, we retake the firſt, and ſo on, returning always and finiſhing by the ſame repeat with which we began. For this purpoſe, we ſhould ſo conduct the modulation, that the end of each repeat might be ſuitable to the beginning of all the reſt; and that the end of all the reſt may ſuit the beginning of that firſt.

The grand Italian airs, and all our arietta's, are in rondeau, as well as the greateſt part of French pieces for the harpſichord.

The *Routines* are magazines of a contrary ſenſe, for thoſe who follow them without reflexion. Such is for muſicians that of rondeau's. A great diſcernment is neceſſary to make a choice of words which are proper to them. It is ridiculous to place a complete thought in rondeau, divided into two branches. It is ridiculous to put in rondeau a compariſon, whoſe application is made only in the ſecond branch, in re-taking the firſt, and finiſhing by it. Laſtly, it is ridiculous to place in rondeau a general thought limited by an exception, relative to the condition of him who ſpeaks; ſo that, forgetting the exception which has reference to himſelf, he may finiſh in re-taking the general thought.

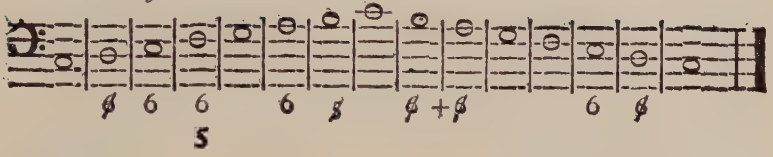
But every time that a ſentiment expreſſed in the firſt branch, brings with it a reflexion which enforces it, and places it in the ſecond; every time that a deſcription of the condition of him who ſpeaks, filling the firſt branch, clears a compariſon in the ſecond; every time that an affirmation in the firſt branch contains its proof, and its confirmation in the ſecond; laſtly, every time that the firſt branch contains the propoſition of doing a thing, and the ſecond the reaſon of the propoſition; in theſe different caſes, and in others ſimilar, the rondeau is always well placed.

RULE OF THE OCTAVE. An harmonic formula, publiſhed the firſt time in 1700, which determines, on the diatonic motion of the baſs, the concord ſuitable to each degree of the tone, as well in major mode as minor, and as well aſcending as the contrary.

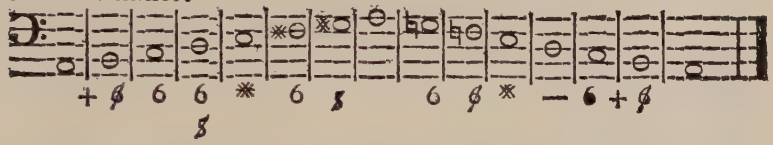
We find this formula cyphered here on the octave of the major mode, and again on the octave in minor.

Rule of the Octave.

In mode major.



In mode minor.



Provided that the tone be well determined, we ſhall not miſtake in accompanying on this rule, as long as the author continues in the ſimple and natural harmony which the mode bears. If he leaves that ſimplicity by ſuppoſed concords, or other licences, it is his buſineſs to expreſs it by ſuitable cyphers, which he alſo ought to do at each change of the tone; but all that is not cyphered ſhould be accompanied according to the rule of the octave; and this rule ſhould be ſtudied on the fundamental baſs, to have a right comprehenſion of its ſenſe.

It is however unlucky, that a formula, deſtined to the practice of elementary rules in harmony, ſhould contain a fault againſt thoſe ſame rules. It is to give early inſtructions to beginners to tranſgreſs the laws that are given them. This fault is in the accompaniment of the ſixth note, with which the concord cyphered by a 6, offends againſt the rules; for we can find no union; and the fundamental baſs deſcends diatonically from a perfect concord on another perfect concord. A liberty to be formed into a rule.

We might manage that there could be an union, by adding a ſeventh to the perfect concord of the dominant; but then this ſeventh, becoming an octave on the following note, would not be preſerved; and the fundamental baſs, deſcending on a perfect concord diatonically, after a concord of ſeventh, would make a movement quite intolerable.

We might alſo give to this ſixth note, the concord of ſmaller ſixth, the fourth of which would form an union; but this would be fundamentally a concord of ſeventh with minor third, where the diſſonance ſhould not be prepared, which is alſo againſt the rules. (Vide To Prepare.)

We might cypher ſixth fourth on this ſixth note, and it would be then the perfect concord of the ſecond; but I am in doubt if the muſicians would approve a variation ſo ill underſtood as that;

a variation which the ear does not adopt, and on a concord which removes too much the idea of the principal modulation.

We might change the concord of the dominant, giving it the ſixth fourth inſtead of the ſeventh, and then the ſimple ſixth would ſuit very well on the ſixth note which follows; but the ſixth fourth would ſuit very ill on the dominant, unleſs it was followed by the perfect concord, or the ſeventh, which would bring back the difficulty. A rule, which ſerves not only in practice, but as a model for practice, ſhould never be drawn from thoſe theoretic combinations rejected by the ear; and each note, particularly the dominant, ſhould convey to it its proper concord whenever it has one.

I look on it then as a certain thing that our rules are bad, or that the concord of ſixth, with which we accompany the ſixth note in aſcending, is a fault that ſhould be corrected; and that to accompany this note regularly, as is neceſſary in a formula, there is only one concord to give it, viz. that of the ſeventh; not a fundamental ſeventh, which, in this movement, not being able to be preſerved but by another ſeventh, would be a fault; but a ſeventh varied by a concord of ſixth added on the tonic: It is clear, that the concord of the tonic is the only one which can be regularly inſerted between the perfect concord, or of ſeventh on the dominant, and the ſame concord on the ſenſible note which immediately follows. I wiſh ſome ingenious perſons may find this correction good: I am ſure, at leaſt, that they will find it regular.

TO RULE THE PAPER. Is to mark on fair paper, the ſtaves to mark the muſic on. (Vide Ruled Paper.)

RULER. A workman whoſe profeſſion conſiſts in ruling the papers for muſic. (Vide Copiſt.)

RULING. The method by which the paper is ruled. "This ruling is too black." "There is pleaſure in writing notes on a neat ruling." (Vide Ruled Paper.)

---

# S.

S. This letter written alone in the reciting part of a concert, ſignifies ſolo, and is then alternative with T, which ſignifies tutti.

SARABAND. The air of a dance, which bears the ſame name, which ſeems to have been tranſmitted from Spain, and was formerly danced with caſtagnetto's. This dance is no longer

uſed

uſed, unleſs in ſome old French operas. The air of the ſaraband is at three ſlow times.

TO SAVE. To ſave, or preſerve a diſſonance, is to reſolve it, according to rules of the conſonance of a following concord. There is a movement preſcribed to this, both in the fundamental baſs of the diſſonant accord, and in the part which forms the diſſonance. There is no method of ſaving, which is not derived from an act of cadence; it is then by the nature of the cadence we would make, that the movement of the fundamental baſs is determined. (Vide Cadence.)

In regard to the part which forms the diſſonance, it ought neither to continue in its place, nor to move by disjoint degrees; but it ought to aſcend or deſcend diatonically, according to the nature of the diſſonance. Maſters ſay, that the major diſſonance ought to aſcend, and the minor to deſcend; which is not without exception, ſince in certain chords of harmony, a ſeventh as well major, ought not to aſcend, but fall; unleſs in the concord, termed very incorrectly, concord of ſuperfluous ſeventh: It is better then to ſay, that the ſeventh and every diſſonance deriving from it, ought to deſcend, and that the ſixth added, and every diſſonance deriving from it, ſhould riſe. This is a rule really general and without any exception. It is the ſame thing with the law of ſaving the diſſonance: there are diſſonances which we may prepare; but there is no one, that we ſhould not ſave.

In regard to the ſenſible note, improperly called major diſſonance, if it ought to aſcend, it is leſs by the rule of ſaving the diſſonance, than by that of the diatonic movement, and to prefer the ſhorteſt way; and effectually there are caſes, as that of the intererrupted cadence, where this ſenſible note does not aſcend.

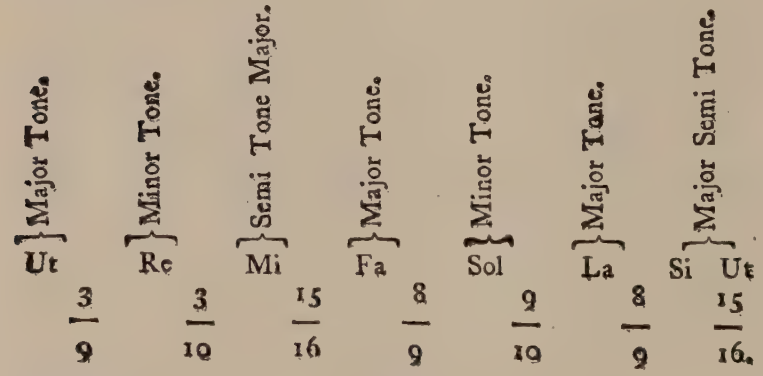
In concords by ſuppoſition, a ſame concord furniſhes two diſſonances, as the ſeventh and ninth, the ninth and fourth, &c. Theſe diſſonances ſhould then have been prepared, and ought both to be ſaved; that is, we muſt pay attention to all that has a diſſonance, not only on the fundamental baſs, but alſo on the thorough.

SCALE. This name is given to the diatonic ſucceſſion of the ſeven notes, ut re mi fa ſol la ſi, of the gamut, becauſe theſe notes are found ranged in the manner of ſcales on the ſtaves of our muſic. This enumeration of all the diatonic ſounds of our ſyſtem, ranged in order, which we call ſcale, was called by the Greeks, tetrachord, becauſe in effect their ſcale was compoſed of only four ſounds, which they repeated from tetrachord to tetrachord, as we do from octave to octave. (Vide Tetrachord.)

Saint Gregory was, they ſay, the firſt who changed the tetrachords of the ancients, into a heptachord, or ſyſtem of ſeven notes: at the end of which, beginning another octave, we find ſimilar ſounds repeated in the ſame order. This diſcovery is very ingeni

ous, and it muſt appear ſingular, that the Greeks, who ſaw very clearly the properties of the octave, ſhould, in ſpite of that, have thought, they ſhould continue attached to their tetrachords. Gregory expreſſed theſe ſeven notes, by the firſt ſeven letters of the Latin alphabet. Gui Aretin gave names to the ſix firſt, but he neglected to give one to the ſeventh; which in France, has ſince been called ſi, and which has no other name yet than B mi, amongſt the other european nations.

We muſt not think, that the connections of the tones, and ſemitones; of which the ſcale is compoſed, are things purely arbitrary; and that by other diviſions as good, an order, and different connections could have been given to the ſound of this ſcale. Our diatonic ſyſtem is better in certain reſpects, becauſe it is engendered by the conſonances, and the difference there are between them. "Let a perſon hear, ſays Monſ. Sauveur, ſeveral times the concord of the fifth, and that of the fourth, he is naturally led to imagine the difference which is betwixt them. It is united, and conjoined with thoſe in our mind, and partakes of their graces; this is the major tone. It is the ſame thing with the minor tone, which is the difference of the minor third and the fourth, and the major ſemi-tone, which is that of the ſame fourth in major third". Morevover, the major tone, the minor tone, and the major ſemi-tone, are the diatonic degrees of which our ſcale is compoſed, according to the following references,




To make a proof of this calculation, we muſt compoſe all the connections compriſed between two conſonant terms, and we ſhall find, that their product gives exactly the reference of the conſonance; and if we re-unite all the terms of the ſcale, we ſhall find the total connection in ſub-double numerical powers; that is, as 1 to 2, which is in effect the exact connection of two extreme terms, viz. of the ut to its octave.

The

The ſcale we have now ſeen, is that which is called natural or diatonic; but the moderns, dividing its degrees into other ſmaller intervals, have derived from it another ſcale, which they have called ſemi-tonic or chromatic ſcale, becauſe it proceeds by ſemi-tones.

To form this ſcale, we have only divided into two equal intervals, or ſuppoſed ſo, each of the five entire tones of the octave, without diſtinguiſhing the major tone from the minor; which, with the two major ſemi-tones which were already found, forms a ſucceſſion of twelve ſemi-tones on thirteen conſecutive ſounds, from one octave to the other.

The uſe of this ſcale is to give the methods of modulating on whatever note we chooſe, as fundamental; and of being able, not only to form any interval on this note, but to eſtabliſh a diatonic ſcale on it, ſimilar to the diatonic ſcale of ut. Whilſt we are contented to have, as tonic, a note of the gamut taken at pleaſure, without troubling ourſelves if the ſounds by which the modulation ought to paſs, were with that note, and between themſelves, in ſuitable references, the ſemi-tonic ſcale was little neceſſary; whatever fa dieſis, whatever ſi B flat, compoſed what was called the ſharps of muſic, there were only two touches to add to the diatonic keys. But ſince we have thought to have felt the neceſſity of eſtabliſhing a perfect ſimilitude between the different tones, it has been neceſſary to find methods of tranſporting the ſame airs and the ſame intervals, higher or lower, according to the tone which we may have choſen. The chromatic ſcale is then become of indiſpenſable neceſſity; and 'tis by its means that we convey an air on ſuch degree of the keys as we would chooſe, and that we render it exactly on this new poſition, ſuch as it may have been imagined for another.

Theſe five added ſounds form no new degrees in muſic; but they are all marked on the neareſt degree, by a B flat if the degree is higher, by a dieſis if it is lower; and the note always takes the name of the degree on which it is placed. (Vide B Flat and Dieſis.)

To aſſign, however, the connections of theſe new intervals, we muſt know, that the two parts or ſemi-tones which compoſe the major tone, are in the references of 15 to 16, and 128 to 135; and that the two which compoſe the minor tone alſo, are in the references of 15 to 16, and 24 to 25; ſo that in dividing the whole octave according to the ſcale of ſemi-tonic, we have all its terms in the references placed on the following figure.

Chromatic

Chromatic Scale drawn from Monſ. Malcolm.

| Major. | Middle. | Major. | Minor. | Major. | Middle. | Major. | Major. | Minor. | Major. | Middle. | Major. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ut, | ut ♯, | re, | mib, | mi, | fa, | fa ♯, | ſol, | ſol ♯, | la, | ſi b, | ſi, ut |
| 15 | 128 | 15 | 24 | 15 | 128 | 15 | 15 | 24 | 15 | 128 | 15 |
| 16 | 135 | 16 | 25 | 16 | 135 | 16 | 16 | 25 | 16 | 135 | 16 |

But we muſt take notice that this diviſion, drawn from Monſ. Malcolm, ſeems to want juſtneſs in many reſpects. Firſt, the ſemi-tones which ought therein to be minor, are major; and that of ſol dieſis in la, which ought to be major, is minor. In the ſecond place, ſeveral major thirds, as that of la in ut dieſis, and of mi in ſol dieſis, are too ſtrong by a comma, which muſt render them inſupportable. Laſtly, the middle ſemi-tone, being there ſubſtituted in the place of the ſemi-tone maximum, gives falſe intervals wherever it is uſed. On which we ought not to forget, that this middle ſemi-tone is greater than the major itſelf, i. e. middle between the maximum and major.

A better and more natural diviſion would then be, to divide the major tone, into two ſemi-tones; the one minor from 24 to 25, the other maximum from 25 to 27, leaving the minor-tone divided into 2 ſemi-tones, the one major, and the other minor, as in the table above. There are ſtill two other ſemi-tonic ſcales, which are derived from two other different methods of dividing the octave by ſemi-tones.

The firſt is made by taking an harmonic, or arithmetical middle, between the two terms of the major tone, and another betwixt thoſe of the minor tone, which divides the one and the other tone into two ſemi-tones almoſt equal; ſo the major tone $\frac{8}{9}$ is divided into $\frac{16}{17}$ and $\frac{17}{18}$ arithmetically, the numbers repreſenting the length of the chords; but when they repreſented the vibrations, the lengths of the chords are reciprocal, and in harmonic proportion, as one $\frac{16}{17}$ $\frac{8}{9}$ which places the greater ſemi-tone in flat.

In the ſame manner the minor tone $\frac{9}{10}$ is arithmetically divided

into

into two ſemi-tones $\frac{18}{19}\ \frac{19}{20}$ or reciprocally one $\frac{18}{19}\ \frac{9}{10}$ but this laſt diviſion is not harmonic.

The whole octave thus calculated, gives the references expreſſed in the following ſcale.

Chromatic Scale by Monſ. Malcolm.

| 16 | 17 | 18 | 19 | 15 | 16 | 17 | 18 | 19 | 16 | 17 | 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | 18 | 19 | 20 | 16 | 17 | 18 | 19 | 20 | 17 | 18 | 16 |
| Ut, | ut ♯, | re, | mi♭, | mi, | fa, | fa ♯, | ſol, | ſol ♯, | la, | fi♭, | fi, | ut. |

Monſ. Salmon relates, in his Philoſophical Tranſactions, that he made, before the Royal Society, a tryal of this ſcale, on chords exactly divided according to theſe proportions, and that they were perfectly in concord with the other inſtruments touched by the beſt hands.

Monſ. Malcolm adds, that having calculated and compared theſe connections, he found a greater number of faults in this ſcale than in the precedent; but that the errors were conſiderably leſs, which makes ſome compenſation.

Laſtly, the other ſemi-tonic ſcale is that of the Ariſtoxenians, which P. Merſenne has very largely treated, and which M. Rameau has endeavoured to renew in theſe laſt times. It conſiſts in geometrically dividing the octave by eleven methods proportioned in twelve ſemi-tones perfectly equal. As their connections are not rational, I will not give here thoſe references which cannot be expreſſed but by the formula itſelf, or by logarithms of the terms of progreſſion between the extremes 1 and 2. (Vide Modification.)

As in the diatonic and chromatic genus the harmoniſts add a third, viz. the enharmonic, this third genus ſhould have its ſcale alſo, at leaſt by ſuppoſition; for tho' the truly enharmonic intervals do not exiſt in our keys, it is yet certain, that every enharmonic paſſage ſuppoſes them; and that the mind, correcting the ſenſation of the ear on this point, paſſes then from one idea to another, only through favour of this interval underſtood. If every tone was exactly compoſed of two minor ſemi-tones, every enharmonic interval would be null, and this genus could no longer exiſt. But as a minor tone itſelf contains more than two minor ſemi-tones, the complement of the ſum of theſe two ſemi-tones to the tone, that is, the ſpace which remains between the dieſis of the inferior note, and the B flat of the ſuperior, is preciſely the enharmonic interval, called commonly the fourth of the

the tone. This fourth of the tone is of two kinds, viz. the major and the minor enharmonic, whoſe connections may be found at the word *Quarter of a Tone.*

This explanation ought to ſuffice to every reader, for the eaſy conception of the enharmonic ſcale, which I have calculated, and here inſerted.

Enharmonic Scale.

| Ut, | ut ♯, | re ♭, | re, | re ♯, | mib, | mi, | mi ♯, | fa, | fa ♯, | ſol ♭, |
|---|---|---|---|---|---|---|---|---|---|---|
| 24/25 | 576/625 | 24/25 | 24/25 | 125/128 | 24/25 | 24/25 | 125/128 | 24/25 | 576/625 | 24/25 |

| ſol, | ſol ♯, | lab, | la, | la ♯, | ſib, | ſi, | ſi ♯, | ut. |
|---|---|---|---|---|---|---|---|---|
| 24/25 | 125/128 | 24/25 | 24/25 | 576/625 | 24/25 | 24/25 | 125/128 | |

Thoſe who would chuſe a clearer account of this point, muſt turn to the word Enharmonic.

SCENE. We diſtinguiſh in lyric muſic, the ſcene from the monologue, in that, there is only one actor in the monologue, and at leaſt two ſpeakers in the ſcene. Conſequently in the monologue, the character of the muſic ſhould be one, at leaſt in regard to the perſon: but in the ſcenes, the muſic ſhould have as many different characters as there are ſpeakers. In effect, as in ſpeaking, each one always continues the ſame voice, the ſame accent, and generally the ſame ſtyle in all that he ſays; ſo every actor, in the different paſſions he expreſſes, ſhould always preſerve a character peculiar to him, and which may diſtinguiſh him from another actor. The grief of an aged man, has not the ſame tone as that of a young one; the paſſion of a Billingſgate fiſh-woman, has different accents from that of a warrior: A Barbarian can never ſay "I adore you," as a profeſſed amoroſo.

We muſt then in ſcenes, render not only the character we would paint, but that of the perſon whom we make to ſpeak. This character is partly denoted by the kind of voice appropriated to each part; the turn in ſinging of a counter-tenor is different from that of the baſs tenor. We place more gravity in the airs of baſs trebles, and more vivacity in thoſe of ſharper voices. But beſides theſe differences, the ingenious compoſer muſt find individual ones to characterize his perſonages, ſo that one ſhall know in a moment, by the peculiar accent of the recitative or air, if it is Mandane or Emira, if its Olintes or Alceſtes, whom

we

we hear. I agree that there are only men of genius, who feel, and mark theſe differences; but I ſay however, that it is only in the obſervation of them, and others ſimilar, that we are able to produce the illuſion.

SCHISMA. A ſmall interval, which is equal to the half of a comma, and whoſe numerical powers are conſequently mute, ſince, to expreſs it in numbers, it would be neceſſary to find a proportional medium between 80 and 81.

SCHOENION. A kind of nome for flutes in the ancient Greek muſic.

SCHOLIA. A kind of ſong amongſt the ancient Greeks, whoſe characters were extremely diverſified according to ſubjects and perſons. (Vide Song)

SECOND. An interval of a conjoint degree, wherefore the diatonic movements are all made on the intervals of the ſecond.

There are 4 kinds of ſeconds. The firſt called diminiſhed ſecond, is made on a major tone, whoſe inferior note is connected by a dieſis, and the ſuperior by a B flat; ſuch, for inſtance is the interval of the re B flat, to the ut dieſis. The connection of this ſecond is from 375 to 384; but it is of no uſe, unleſs in the enharmonic genus: the interval alſo is found null in virtue of the modification. In regard to the interval of one note to its dieſis, which Broſſart calls diminiſhed ſecond, it is not a ſecond, it is a changed uniſon.

The ſecond, which is called minor ſecond, is conſtituted by the major ſemi-tone, as of ſi to ut, or of mi to fa; its connection is from 15 to 16. The third is the major ſecond, which forms the interval of a tone; as this tone may be major or minor, the reference of this ſecond, is from 8 to 9 in the firſt caſe, from 9 to 10 in the ſecond. But this difference is null in our muſic.

Laſtly, the fourth is the ſuperfluous ſecond, compoſed of a major tone, and a minor ſemi-tone, as from fa to ſol dieſis: Its connection is from 64 to 75.

There are in harmony two concords, which bear the name of ſecond, the firſt is ſimply called concord of ſecond. It is a concord of varied ſeventh, whoſe diſſonance is in the baſs; from whence it follows very clearly, that the baſs ſhould ſyncopate to prepare it. (Vide to Prepare.)

When the concord of ſeventh is dominant, i. e. when the third is major, the concord of the ſecond is called concord of triton, and the ſyncope is not neceſſary, becauſe the preparation is not ſo.

The other is called concord of ſuperfluous ſecond. It is a concord varied from that of diminiſhed ſeventh, the ſeventh of which itſelf is conveyed to the baſs. This concord is equally good with or without a ſyncope. (Vide Syncope.)

SEMI. A word borrowed from the Latin, which ſignifies half, We uſe it in muſic, inſtead of the hemi of the Greeks, to compoſe

ſeveral technical words very barbarouſly, the half Greek and the half Latin. This word, before the Greek name in any interval whatever, always ſignifies a diminution, not the half of this interval, but only a minor ſemi-tone; wherefore ſemi-diton is the minor third; ſemi-diapente, the falſe fifth; ſemi-diateſſaron, the diminiſhed fourth.

SEMI BREVE. Is, in our ancient muſic, a power of notes or meaſure of a time, which comprehends the ſpace of two minime's, that is, the half of a breve. The ſemi-breve is however called round, becauſe it has that figure; but formerly it was in a lozenge.

Anciently the ſemi-breve was divided into major and minor, the major is equal to two thirds of the perfect breve, and the minor to the other third of the ſame breve; wherefore the major ſemi-breve contains two minors

The ſemi-breve, before the minime was invented, being the note of leſs power, was not ſub-divided. This indiviſibility, they ſay, is expreſſed in ſome meaſure, by its figure of a lozenge terminated above, below, and at the two ſides, by points. Moreover Muris proves, by the authority of Ariſtotle and Euclid, that the point is indiviſible; from whence he concludes, that the ſemi-breve encloſed between four points is indiviſible as themſelves.

SEMI TONE. Is the ſmalleſt of all the intervals admitted in modern muſic; it is nearly equal to the half of a tone.

There are ſeveral kinds of ſemi-tones, two are diſtinguiſhed in practice, the major, and the minor; three others are known in harmonic calculations, viz. The ſemi-tone maxime, the minime, and the middle; the ſemi-tone major is the difference of the major third to the fourth, as mi fa. Its connection is from 15 to 16, and it forms the ſmalleſt of all the diatonic intervals.

The minor ſemi-tone is the difference of the major third to the minor. It is marked on the ſame degree by a dieſis or a B flat: It forms only one chromatic interval, and its reference is from 24 to 25.

Though we place a difference between theſe two ſemi-tones by the method of noting them, there is none, however, on the organ and harpſichord; and the ſame ſemi-tone is ſometimes major and ſometimes minor, ſometimes diatonic and ſometimes chromatic, according to the mode in which we are however in practice. We call ſemi-tones minor, thoſe, which being marked by a B flat or dieſis, do not change their degree; and ſemi-tones major, thoſe, which form an interval of the ſecond.

In regard to the three other ſemi-tones admitted only in theory, the ſemi-tone maxime is the difference of the tone major to the ſemi-tone minor, and its connection is from 25 to 27. The middle ſemi-tone is the difference major to the tone major, and its connection is from 128 to 135. Laſtly, the ſemi-tone minime,

is

is the difference of the ſemi-tone maxime to the middle ſemi-tone, and its connection is from 125 to 128, of all theſe intervals, there is only the major ſemi-tone, which, in quality of ſecond, may be ſometimes admitted into harmony.

SEMI TONIC. A ſemi-tonic or chromatic ſcale. (Vide Scale.)

SENSIBILITY. A diſpoſition of the ſoul which inſpires the compoſer with the lively ideas which he wants; the executant, with the lively idea of theſe ſame expreſſions; and the auditor, with the lively impreſſion of the beauties and errors of muſic which he is made to hear. (Vide Taſte.)

SENSIBLE. A ſenſible concord is that which is otherwiſe called dominant concord. (Vide Concord.)

It is practiced only on the dominant of the tone; from whence it receives the name of dominant concord, and it always bears the ſenſible note for third of that dominant, from whence it receives the name of ſenſible concord. (Vide Concord.)

In regard to the ſenſible note. (Vide Note.)

SEVENTH. A diſſonant interval varied from the ſecond, which is called by the Greeks, heptachordon, becauſe it is formed of ſeven ſounds, or ſix diatonic degrees. There are four ſorts of them. The firſt is the minor ſeventh compoſed of four tones, three major and a minor, and of two major ſemi-tones, as from mi to re: and chromatically of 10 ſemi-tones, ſix major and four minor. Its connection is from 5 to 9.

The ſecond is the major ſeventh, compoſed diatonically of five tones, three major and two minor, and of a major ſemi-tone; ſo that no more than one major ſemi-tone is neceſſary to compoſe an octave, as from ut to ſi, and chromatically of 11 ſemi-tones, ſix major, and five minor. Its connection is from 8 to 15.

The third is the diminiſhed ſeventh, it is compoſed of three tones, two minor and one major, and of three major ſemi-tones, as from ut dieſis, to ſi B flat. Its connection is from 75 to 128.

The fourth is the ſuperfluous ſeventh, it is compoſed of five tones, three minor and two major, a ſemi-tone major, and a ſemi-tone minor as from ſi B flat, to la dieſis, ſo that there is only a comma wanting to it to form an octave. Its connection is from 81 to 160, but this laſt kind is not uſed in muſic, unleſs in ſome enharmonic tranſitions.

There are three concords of the ſeventh.

The firſt is fundamental, and bears ſimply the name of ſeventh, but when the third is major, and the ſeventh minor, it is called ſenſible or dominant concord. It is compoſed of the third, the fifth, and the ſeventh.

The ſecond alſo is fundamental, and is called concord of diminiſhed ſeventh; it is compoſed of the minor third, the falſe fifth,

and the diminiſhed ſeventh, whoſe name it takes, that is, of three minor conſecutive tones, and is the only concord, which is thus formed of equal intervals: It is made on the ſenſible note only. (Vide Enharmonic.)

The third is called concord of ſuperfluous ſeventh; it is a concord by ſuppoſition formed by the dominant accord, below which the baſs makes the tonic be heard.

There is alſo a concord of ſeventh and ſixth, which is only a variation of the concord of the ninth. It is only practiſed in the organ points on account of its duration. (Vide Concord.)

SERENADE. A concert given in the night under the windows of ſome one.

It is generally compoſed of inſtrumental muſic; ſometimes however the voice is added to it. We call ſerenades alſo the pieces compoſed or executed on theſe occaſions. The mode of ſerenades has been long obſolete; they continue no longer but amongſt the lower people, and that is a pity. The ſilence of the night, which baniſhes all confuſion, makes the muſic ſuperior, and renders it more delicious.

This word, Italian in its origin, comes without doubt from ſereno, or from the Latin ſerum, in the evening. When the concert is performed in the morning, or at break of day, it is called aubade.

SESQUI. A particle often uſed by our ancient muſicians in the compoſition of words, ſerving to expreſs the different ſorts of meaſures.

They called Seſqui Alter's, the meaſures whoſe principal note was equal to the half more than its ordinary powers, that is, three of the notes, of which otherwiſe it would have only equalled two, which had place in all the triple meaſures, whether in major, where the breve itſelf without points was equal to three ſemi-breves, or in the minor, where the ſemi-breve equalled three minime's, &c.

They called the triple alſo ſeſqui alter, marked by this ſign C $\frac{9}{8}$, double ſeſqui fourth, the triple marked C $\frac{9}{4}$, and ſo on with the reſt. Seſqui diton, or hemi diton, in the Greek muſic, is the interval of a minor third.

SEXTUPLE. A name given rather improperly to meaſures of two times compoſed of ſix equal notes, three for each time. Theſe kinds of meaſures have been alſo called by ſome improperly, "ſix timed meaſures."

We may reckon five kinds of theſe ſextuple meaſures, that is, as many as there are different powers of the notes, from that which is compoſed of ſix rounds or ſemi-breves, called in France triple of

ſix

ſix for one, and which is expreſſed by this cypher $\frac{6}{1}$ to that called triple of ſix for ſixteen, compoſed only of ſix double demi-crotchets only, and which is marked alſo $\frac{6}{16}$. The greateſt part of theſe diſtinctions are aboliſhed, and in effect they are rather uſeleſs, ſince all theſe different figures of notes, are leſs different meaſures than modifications of the movement in the ſame kind of meaſure; which is ſtill better marked by a ſingle word written at the head of the air, than with all the confuſion of cyphers and notes, which only ſerve to increaſe the difficulty of an art which is puzzling enough in itſelf. (Vide Double, Triple, Time, Meaſure, &c.)

SHARP. The alteration of a note or an interval by a dieſis or B flat. This is properly the common and general name of the accidental dieſis's and B's flat. The word is no longer in uſe, but there is no other ſubſtituted in its place. The fear of uſing ſuperannuated terms daily enervates our language; the fear of uſing old terms decreaſes it daily: Its greateſt enemies will ever be thoſe who purify it.

They called ſharp alſo the chromatic touches of the keys, which we now call, white touches, and which were formerly made black, becauſe our rude anceſtors had not the ingenuity of making the keys black, to give a greater eclat to the Ladies fingers. We call at preſent cut ſharps, thoſe of the touches which are broken to ſupply the *Ravalement*.

TO SKIP. We ſkip a tone, when giving a Flute too much wind, or in the pipe of a wind inſtrument, we force the air to be divided, and make inſtead of the full tone of the flute, or pipe, only ſome one of its harmonies. When the ſkip is of an entire octave, it is called to octave. It is clear that to vary the ſounds of the trumpet and french-horn, we muſt neceſſarily ſkip, and it is only in ſkipping that we make octaves on the flute.

SI. One of the ſeven ſyllables which they make uſe of in France to ſol-fa their notes. Guy Aretin in compoſing his gamut, invented only ſix of theſe ſyllables, becauſe he only changed in hexachords, the Greek tetrachords, tho' in the end, his gamut, as well as ours, was compoſed of ſeven notes. It happened from thence, that to name the ſeventh, it was neceſſary every movement to change the names of the reſt, and to name them in different manners: an embarraſſment which continues no longer, ſince the invention of ſi, on the gamut, from which a muſician, named de Nevers, made, in the beginning of this century, an expreſs work.

Bropard, and thoſe who have followed him, attribute the invention of ſi to another muſicain, named Le Maire, betwixt the middle and end of the laſt century; others give the honour of it to a certain

Vander

Vander Pullen: others aſcend as far as Jean de Muris, about the year 1330, and the Cardinal Bona, ſays, that about the eleventh age, which was that of Aretin, Ericius Dupuis added a note to the ſixth of Guy, to avoid the difficulties of the diviſions, and facilitate the ſtudy of muſic.

But, without attending to the inventions of Ericius Dupuis, which without doubt died with him, or on which Bona, later by five centuries, may have been deceived; it is even eaſy to prove, that the invention of ſi is much later than Jean de Muris, in whoſe writings we ſee nothing ſimilar to it.

In regard to Vander Pullen, I cannot ſay any thing as I am not acquainted with him Le Maire now remains, in whoſe favour the voices of all ſeem to unite; If the invention conſiſts in having brought into practice the uſe of this ſyllable ſi, I do not ſee many reaſons for diſputing the honour with him. But if the true inventor is he, who has firſt found the neceſſity of a ſeventh ſyllable, and who has added one in conſequence, we need not ſearch far to find, that Le Maire has no claim to this title; for we find in ſeveral parts of P. Merſenne's writings, the neceſſity of the ſeventh ſyllable to avoid the diviſions; and he witneſſes that ſeveral had invented or practiſed this ſeventh ſyllable nearly in the ſame time; and amongſt others, Gilles Grand Jean, writing maſter of Sens; but that ſome named that ſyllable ci, others di, others ni, others ſi, others za, &c. Even before P. Merſenne, we find, in a work of Banchieri, monk of Olivet, printed in 1614, and entituled Caſtella di Muſici, the addition of the ſame ſeventh ſyllable; he calls it Bi by B ſharp, Ba by B flat, and he aſſures us, that this addition has been very much approved at Rome. So that all the pretended invention of Le Maire conſiſts, at the moſt, in having written or pronounced ſi, inſtead of having written or pronounced Bi or Ba, Ni or Di, and this is what has immortalized Le Maire. As to what remains, the uſe of the ſi is known only in France, and in ſpite of what the monk Banchieri ſays of it, it is not even preſerved in Italy.

SICILIAN. A kind of air for dancing, in the 6—4 or 6—8 meaſures of a movement much ſlower, but yet more ſpecified than the jig.

SIGNS. Are, in general, all the different characters made uſe of to mark the muſic. But this word is more particularly underſtood of the dieſis's B's flat, B's ſharp, points, repeats, pauſes, guidons, and other ſmall detached characters, which without being real notes, are modifications of notes and of the method of executing them.

SILENCES. Signs anſwering to the different powers of the notes, which ſtand in the place of thoſe notes, mark, that the whole of their time ſhould be paſſed in ſilence.

The

Tho' there are 10 powers of different notes, from the maximum to the quadruple demi-crotchet, there are however only 9 different characters for the ſilences; for that which ought to correſpond to the maximum, has always failed, and to expreſs its duration, we double the reſt four meaſures, being of an equality with the longue.

Theſe different ſilences are then, firſt, the reſt of four meaſures, which is equal to a longue; Secondly, the reſt of two meaſures, equal to a breve; Thirdly the pauſe, equal to a ſemi-breve; Fourthly the demi-pauſe, equal to a minime; Fifthly the minime reſt, equal to a crotchet; Sixthly, the demi-minime reſt, equal to a demi-crotchet; Seventhly, the quarter-minime reſt equal to a double demi-crotchet; Eighthly, the demi-quarter minime reſt, equal to a triple demi-crotchet; and Ninthly the ſixteenth of a minime reſt, equal to a quadruple demi-crotchet.

We muſt take notice, that the point has no place among ſilences as among notes; for tho' a crotchet and minime reſt may be of equal powers, it is not cuſtomary to point the latter to expreſs the powers of a pointed crotchet, but we ought, after the minime reſt, to write alſo a demi-minime reſt. However, as ſome point the ſilences alſo, the executant muſt be ready to all.

SIMPLE. In doubles and variations, the firſt couplet, or original air, ſuch as it is now marked, is called the ſimple. (Vide Double, Variations.)

TO SING. Is, in its moſt general acceptation, to form ſtrong and varied ſounds by the voice. But it is moſt generally the formation of different inflexions in the voice, ſonorous, agreeable to the ear, by intervals admitted in muſic and within the rules of modulation.

We ſing more or leſs agreeably, in proportion as the voice is more or leſs agreeable and ſonorous; the ear more or leſs juſt; the organs more or leſs flexible; the taſte more or leſs formed; and more or leſs practiſed in the art of ſinging. To which we ſhould add, in imitative and theatrical muſic, the degree of ſenſibility which affects us, more or leſs, with the ſentiments we are to render. We have alſo more or leſs diſpoſition towards ſinging, according to the climate in which we are born, and according to the more or leſs accent in our natural language. For the more accented the language is, and, conſequently, the more melodious, more thoſe who ſpeak it have the facility of ſinging it.

There has been compoſed an art of ſinging, that is, obſervations on thoſe voices which ſung the beſt; there have been compoſed, rules for facilitating and improving the uſe of this natural endowment. But there remain many diſcoveries to be made, on the eaſieſt, ſhorteſt, and ſureſt method of acquiring that art.

SINGER.

SINGER. A muſician who ſings in a concert.

SINGING MASTER. A muſician who teaches the reading of vocal muſic, and ſinging on the notes.

The functions of the ſinging-maſter relate to two principal objects. The firſt, which regards the culture of the voice, is to draw from it all that can be given in regard to ſinging, whether by the extent, by the juſtneſs, by the ſound, by the nimbleneſs, or by the art of enforcing and ſweetening the ſounds, and learning to manage and modify them with all the ingenuity poſſible.

The ſecond object regards the ſtudy of the ſigns, that is, the art of reading the notes on the paper, and the cuſtom of decyphering it with ſo much facility, that, at the opening of the book, we may be able to ſing every kind of muſic. (Vide Notes.)

A third part of the functions of the ſinging-maſter regards the knowledge of the language, particularly of the accents, of the quantity and beſt method of pronouncing them; becauſe the errors of pronunciation are much more ſenſible in a ſong, than in converſation; and a well compoſed vocal, ſhould be only a more energic and more agreeable method of marking the proſody and accents. (Vide Accent.)

SIXTH. The ſecond of two imperfect conſonances, called hexachord by the Greeks, becauſe its interval is formed of ſix ſounds, or five diatonic degrees. The ſixth is a natural conſonance, but only by combination; for there is not in the order of conſonances, any ſimple or direct ſixth.

To conſider the ſixth only by their intervals, we find four kinds, two conſonant and the diſſonant.

The conſonants are, firſt, the minor ſixth compoſed of three tones and two ſemi-tones major, as mi ut. Its relation is from five to eight. Secondly, the major ſixth, compoſed of four tones and a major ſemi-tone, as ſol mi. Its connection is from three to five. The diſſonant ſixths are, firſt, the diminiſhed ſixth, compoſed of two tones and three major ſemi-tones, as ut dieſis la B flat; and whoſe relation is from 125 to 192. Secondly, the ſuperfluous ſixth, compoſed of four tones, a major ſemi-tone, and a minor ſemi-tone, as ſi B flat, and ſol dieſis. The relation of this ſixth is from 72 to 125.

Theſe two laſt intervals are never uſed in melody; and the diminiſhed ſixth is omitted in harmony.

There are ſeven concords which have the name of ſixth. The firſt is ſimply called concord of ſixth; it is the perfect concord, whoſe third is conveyed to the baſs. Its place is on the mediant of the tone, or on the ſenſible note, or on the ſixth.

The ſecond is called concord of ſixth-fourth. This is alſo the perfect concord, whoſe fifth is conveyed to the baſs. It is never made but on the dominant or on the tonic.

The

The third is called concord of ſmaller ſixth. It is a concord of ſeventh, whoſe fifth is conveyed to the baſs. The ſmaller ſixth is conveyed ordinarily on the ſecond note of the tone, or on the ſixth.

The fourth is the concord of ſixth and fifth, or greater ſixth. It is alſo a concord of ſeventh, but whoſe third is conveyed to the baſs. If the fundamental concord is dominant, then the concord of greater ſixth loſes this name, and is called concord of falſe fifth. (Vide Falſe Fifth.) The greater ſixth is commonly placed only on the fourth note of the tone.

The fifth is the concord of ſixth added. A fundamental concord, compoſed, as that of the greater ſixth, of a third, a fifth, a major ſixth; and which is placed in the ſame manner on the tonic or fourth note. We can then diſtinguiſh theſe two concords only by the method of ſaving them; for if the fifth deſcends, and the ſixth remains, it is the concord of greater ſixth, and the baſs forms a perfect cadence; but if the fifth remains, and the ſixth aſcends, it is the concord of ſixth added, and the fundamental baſs forms an irregular cadence. Moreover, as, after having ſtruck this concord, we are maſters of one of theſe two methods, this keeps the audience in ſuſpence on the true foundation of the concord, until the end has determined it: and 'tis this liberty of chooſing, that Monſ. Rameau calls double-employ. (Vide that word.)

The ſixth concord is that of major ſixth and falſe fifth, which is no more than a concord of ſmaller ſixth in minor mode, in which the falſe fifth is ſubſtituted in place of the fourth; or, to expreſs myſelf differently, it is a concord of diminiſhed ſeventh, in which the third is conveyed to the baſs. It is placed only on the ſecond note of the tone.

Laſtly, The ſeventh concord of ſixth, is that of the ſuperfluous ſixth. It is a kind of ſmaller ſixth, which is never practiſed but on the ſixth note of a minor tone deſcending on the dominant; as then the ſixth of this ſixth note is naturally major; it is ſometimes rendered ſuperfluous by adding to it a dieſis. That ſuperfluous ſixth then becomes an original concord, which is not overthrown or varied. (Vide concord.)

SLOWLY. This word anſwers to the Italian largo, and denotes a ſlow movement. The ſuperlative ſound, very ſlowly, marks the ſloweſt of all the movements.

SOL. The fifth of the ſix ſyllables invented by Aretin, to pronounce the notes of the gamut. The natural ſol anſwers to the letter G. (Vide Gamut.)

TO SOL FA. Is, in tuning the ſounds, to pronounce at the ſame time the ſyllables of the gamut which correſpond to them. This exerciſe is that by which thoſe begin who learn muſic,

that the idea of theſe different ſyllables uniting in their mind to that of the intervals which have relation to it, theſe ſyllables aſſiſt them to recall theſe intervals.

Ariſtides Quintilian teaches us, that the Greeks had four ſyllables or denominations of notes to ſol fa, which they repeated at each tetrachord, as we repeat ſeven in each octave. Theſe four ſyllables were the following, te, ta, thè, tho. The firſt anſwered to the firſt ſound, or the hypate of the firſt tetrachord, and the following; the ſecond to the parhypate; the third to the lichanos; the fourth to the nete; and ſo on in re-beginning: a method of ſol-faing, which, ſhewing us clearly that their modulation was confined within the extent of the tetrachord, and that the homologous ſounds, preſerving both the ſame connections, and the ſame names, from one tetrachord to another, were repeated from fourth to fourth, as amongſt us from octave to octave, proves, at the ſame time, that their harmonic generation, had no relation with ours, and was eſtabliſhed on principles entirely different.

Guy d'Arezzo, having ſubſtituted his hexachord in the place of the ancient tetrachord, ſubſtituted alſo, to ſol-fa it, ſix other ſyllables to the fourth which the Greeks uſed differently. Theſe ſix ſyllables are the following, ut, re, mi, fa, ſol, la; drawn, as every one knows, from the Hymn of St. John Baptiſt. But every one does not know, that the air of this hymn, as it is now ſung in the Roman-church, is not exactly that from which Aretin took his ſyllables; ſince the ſounds which bear them in this hymn, are not thoſe which bear them in his gamut. We find, in an ancient manuſcript, in the library of the Chapter of Sens, this hymn; ſuch, probably, as it was ſung in the time of Aretin; and in which each of the ſix ſyllables is exactly applied to the correſpondent ſound of the gamut, as may be ſeen in Fig. VI. Plate I.

It ſeems that the uſe of the ſix ſyllables of Guy was not very ſoon extended out of Italy, ſince Muris witneſſes having heard in Paris, the ſyllables, pro, to, do, no, a, inſtead of thoſe. But in time, thoſe of Guy gained the day, and were received in France as in the reſt of Europe. There is now Germany alone where they ſol-fa by the letters of the gamut only, and not by ſyllables; ſo that the note which in ſol-faing we call la, they call A; that which we call ut, they call C. For the dieſis'd notes, they add an s to the letter, and pronounce that s is; ſo that, for inſtance, to ſol-fa re dieſis, they pronounce dis. They have alſo added the letter h, to remove the equivocation of ſi, which is b only by being b flat; when it is b ſharp, it is h.

They know in ſol-faing no other b flat than that alone; inſtead of the b flat of every other note, they take the dieſis of that

that which is below; ſo for la b flat, they ſol fa G s; for mi b flat, D s; and this method of ſol-faing is ſo rough and confuſed, that one muſt be a German to make uſe of it, and to become by that means a great muſician.

Since the eſtabliſhment of the gamut of Aretin, they have endeavoured, at different times, to ſubſtitute other ſyllables in the room of his. As the voice of the three firſt is rather dull, Monſ. Sauveur, in changing the method of pricking the notes, changed alſo that of ſol-faing; and named the eight notes of the octave by the eight following ſyllables, pa, ra, ga, da, ſo, bo, lo, do. Theſe names had no better ſucceſs than the notes; but as to the ſyllable do, it was prior to M. Sauveur. The Italians have always uſed it, inſtead of ut, to ſol-fa, though they name it *ut*, and not *do*, in the gamut. In regard to the addition of ſi, vide Si.

In regard to the notes changed by dieſis or b flat, they convey the name of the note to the natural, and that cauſes, in the method of ſol-faing, many difficulties, which M. de Boiſgelou has propoſed to remedy, by adding five notes to complete the chromatic ſyſtem, and giving a particular name to each note. Theſe names, with the ancients, are in all about twelve in number, as many as there are chords in this ſyſtem, viz. ut, de, re, ma, mi, fa, fi, ſol, be, la, ſa, ſi. By means of theſe five notes added, and of the names which they bear, all the b's flat and dieſis's are annihilated; as may be ſeen at the word Syſtem, in the expoſition of that of Monſ. de Boiſgelou.

There are different methods of ſol-faing, viz. by diviſions, by tranſpoſition, and in the natural. The firſt method is the moſt ancient; the ſecond, the beſt; and the third, the moſt general in France. Several nations have preſerved, in the diviſions, the ancient nomenclator of the ſix ſyllables of Aretin.

Others have retrenched them, as the Engliſh, who ſol-fa on theſe four ſyllables only, mi, fa, ſol, la. The French, on the contrary, have added a ſyllable to confine, under different names, all the ſeven diatonic ſounds of the octave.

The inconveniencies of Aretin's method are conſiderable, for thro' the not rendering the gamut complete, the ſyllables of that gamut ſignify neither the fixed touches of the keys, nor the degrees of the tone, nor even the determined intervals. By the diviſions, la fa, you may form an interval of major third in deſcending, or minor third in aſcending, as may be eaſily ſeen by the gamut, &c. (Vide Gamut.)

It is ſtill worſe in the Engliſh method. We find every moment different intervals which cannot be expreſſed but by the ſame ſyllables; and the ſame names of the notes return in every

fourth, as among the Greeks, inſtead of returning only at every octave, as in the modern ſyſtem.

The method of ſol-faing eſtabliſhed in France, by the addition of ſi, is certainly much ſuperior to all this; for the gamut being found complete, the diviſions become uſeleſs, and the analogy of the octaves is perfectly obſerved. But the muſicians have again ſpoilt this method, by the ſtrange imagination of rendering the names of the notes always fixed and determined on the touches of the keys; ſo that theſe touches have all a double name, whilſt the degrees of a tranſpoſed tone have none: an error which loads, univerſally, the memory with all the dieſis's or B's flat of the cleff; which removes from the names of the notes the expreſſion of the intervals proper to them; and which effaces, laſtly, as much poſſible, all the traces of modulation.

Ut or re are not, or ought not to be ſuch, or ſuch a touch of the keys, but ſuch a chord of the tone. In regard to the fixed touches, it is by the letters of the alphabet that they are expreſſed. The touch which you call ut, I call C; that which you call re, I call D. They are not ſigns that I invent; they are ſigns entirely eſtabliſhed, by which I very clearly determine the fundamental of a tone. But this tone being once determined, tell me, I beg, in your turn, how you name the tonic which I name ut, and the ſecond note, which I name re, and the mediant, which I name mi?

For theſe names, relative to the tone and the mode, are eſſential for the determination of ideas, and the juſtneſs of the intonations. If we give it a due reflexion, we ſhall find, that what the French muſicians call *to ſol-fa in natural*, is entirely out of nature. This method is unknown in every other nation, and cannot certainly gain ſucceſs in any; every one muſt feel the contrary, that nothing is more natural than to ſol-fa by tranſpoſition when the mode is tranſpoſed.

We have, in Italy, a recueil of leſſons to ſol-fa, called Solfeggi. This recueil, compoſed by the celebrated Leo, for the uſe of beginners, is very highly eſteemed.

SOLO. This Italian word is angliciſed in muſic, and applied to a piece which is ſung with a ſingle voice, or which is played on one inſtrument, with a ſimple accompaniment of baſs, or harpſichord; and this is what diſtinguiſhes the ſolo from the recital, which may be accompanied by the whole orcheſtra. In the pieces called concerto's, we write always the word ſolo on the principal part when it recites.

SONATA. A piece of inſtrumental muſic, compoſed of three or four conſecutive pieces of different characters. The ſonata is nearly for inſtruments, what the cantata is for the voice.

The

The ſonata is ordinarily made for a ſingle inſtrument which recites, accompanied by a thorough baſs; and in ſuch a compoſition, we are attached to whatever is moſt favourable to make the inſtrument ſplendid, for which we labour; whether by the turn of ſinging, or by the choice of the ſounds which are moſt ſuitable to that kind of inſtrument, or by the boldneſs of the execution. There are alſo ſonata's in trio, which the Italians generally call ſinfonie; but when they paſs three parts, or there is ſome one reciting, they take the name of concerto. (Vide Concerto.)

There are ſeveral kinds of ſonata's. The Italians reduce them to two principal ſorts: the one which they call Sonate di Camera, ſonata's for a private room, which are compoſed of ſeveral familiar or dancing tunes; ſuch nearly as thoſe recueils which, in France, they call ſuites. The other kind is called Sonate da Chieſa, church ſonata's, in the compoſition of which, there ought to enter more labour, pains, harmony, and airs more ſuitable to the dignity of the place. Of whatever kind the ſonata's may be, they generally begin by an adagio; and after having paſſed by two or three different movements, finiſh by an allegro, or a preſto.

Now, that inſtruments form the moſt important part of muſic, the ſonata's are extremely a-la-mode, as well as every kind of ſymphony; the vocal is only acceſſary, and the air accompanies the accompaniment. We receive this ill taſte from thoſe who, wiſhing to introduce the turn of Italian muſic in a language not ſuſceptible of it, have obliged us to endeavour to make with inſtruments, what was impoſſible for us to form with the voice. I. dare to foretell, that ſo unnatural a taſte cannot continue. Muſic, purely harmonic, is trifling: to pleaſe conſtantly, and prevent languor, it ought to be raiſed to the rank of imitative arts; but its imitation is not always immediate, as thoſe of poetry and painting; the words is the method by which the muſic determines oftenеſt the object whoſe image it offers us; and it is by the touching ſounds of the human voice, that this image awakens in our ſouls the ſentiment which it ought to produce. Who does not feel how far the pure ſymphony, in which we ſeek only to render the inſtrument brilliant, is from that energy? Can all the trifles of Monſ. Mondonville's violin ſtrike me as two ſounds of Mad. Le Maure's voice? Symphony animates the muſic, and adds to its expreſſion, tho' it does not ſupply the place of it. To know what all this fracas of ſonata's would mean, with which we are loaded, we muſt do as the ignorant painter, who was obliged to write under his figures, "This is a tree." "This is a man." "And this is a horſe."

SONG. A kind of very ſhort lyric poem, which generally acts in agreeable ſubjects, to which a tune is added, to be ſung on familiar

familiar occaſions; as at table, with one's friends, with one's miſtreſs, and even alone, to remove, for ſome moments, weariſomeneſs, if we are rich; and to ſupport poverty and labour with more reſolution, if poor.

The uſe of ſongs ſeems to be a natural conſequence from that of words, and, in effect, is not leſs general; for wherever they ſpeak, they ſing. It is only neceſſary, for the conception of them, to extend the organs, give an agreeable turn to the ideas we are delighted with, and fortify by the expreſſion, of which the voice is capable, the ſentiments we would chuſe to render, or the image we would paint. The ancients had not the art of writing at the time they had of ſinging. Their laws and their hiſtories, the praiſes of their gods and heroes, were ſung before they were written. And from thence it happens, according to Ariſtotle, that the ſame Greek name was given to the laws and ſongs.

All the lyric poetry was properly conſiſting of ſongs only; but I ought to confine myſelf here to ſpeaking of that which bore this name particularly, and which had its character in the moſt complete manner, according to our ideas.

Let us begin by ſongs for the table. In the moſt diſtant times, ſays Monſ. de la Nauze, all the gueſts, according to Dicearchus, Plutarch, and Artemon, ſung together, and in the ſame ſtrain, the praiſes of the Divinity. Wherefore, theſe ſongs were veritable pæans, or ſacred cantics. The gods were not diſturbers of their feaſts, and thus diſdained not to admit them to their pleaſures.

In the end the gueſts ſung ſucceſſively, each in his turn, holding a branch of myrtle, which paſſed from the hand of him who had ſung, to him who ſung next. Laſtly, when muſic was improved in Greece, and the lyre was uſed in feaſts, there were, ſay the authors already cited, only the ingenious who were qualified to ſing at table, at leaſt, when accompanied by the lyre. The others, obliged to confine themſelves to the branch of myrtle, gave riſe to a Greek proverb, by which they ſaid, that a man ſung with the myrtle, when they would tax him with ignorance.

Theſe ſongs accompanied with the lyre, and of which Terpander was the inventor, were called ſcoliæ, a word which ſignifies oblique, to denote, according to Plutarch, the difficulty of *the ſong*, or, as Artemon will have it, the irregular ſituation of thoſe who ſung; for, as they were obliged to be ingenious for this method of ſinging, each one did not ſit in his rank, but only thoſe who underſtood muſic, which were diſperſed here and there, and placed obliquely with relation to each other.

The ſubjects of the ſcholiæ were drawn not only from love and wine, or pleaſure in general, as at preſent, but from hiſtory alſo, war, and even morality. Such is the ſong of Ariſtotle on the death

death of Hermias, his friend and ally, which occaſioned the author the accuſation of impiety.

" O virtue, who, ſpite of the difficulties which thou preſenteſt " to impotent mortals, art the charming object of their ſearches! " Virtue pure and lovely! Amongſt the Greeks, a death for " thee was reckoned enviable; the ſuffering with conſtancy a " dread calamity more than praiſe-worthy. Such are the ſeeds " of immortality which thou expandeſt over the heart. They " fruits are more to be valued than gold, than the love of pa- " rents, or the moſt tranquil ſlumbers. For thee the god-like " Hercules, and the ſon of Leda, endured ten thouſand toils, " and the ſucceſs of their exploits proclaimed thy power. It is " through love for thee that Ajax and Achilles deſcended to Plu- " tonian manſions; and 'twas in view of thy celeſtial beauty " that the Prince of Atarnes deprived himſelf of Sol's bright " beam; a prince immortaliſed for ever. The daughters of me- " mory ſhall ever ſing his glory, when tuning their ſoft lyres to " hoſpitable Jove, and the value of a ſincere and laſting friend- " ſhip."

All their moral ſongs were not ſo grave as that: here is one of a different taſte, taken from Athenæus.

" The chief of all bleſſings is health; the ſecond, beauty; the " third, riches honeſtly collected; and the fourth, the juvenile " days we paſs with our friends."

In regard to the ſcholiæ, which conſiſt of love and wine, we may judge of them by the ſeventy odes of Anacreon, which remain to us. But even in theſe kind of ſongs, we may ſee that love of their country and liberty moſt clearly ſhine, with which the Greeks were ever animated.

" Wine and health, ſays one of theſe ſongs, for my Clitagora " and myſelf, with aſſiſtance from the Theſſalians." That is, beſides that Clitagora was a Theſſalian, the Athenians had formerly received ſuccour from the Theſſalians, againſt the tyranny of Pyſiſtratides.

They had alſo ſongs for the different profeſſions. Such were the ſongs of the ſhepherds; one kind of which, called bucoliaſm, was abſolutely the ſong of thoſe who drove the herds; and the other, which is properly the paſtoral, was an agreeable imitation of it. The ſong of the reapers, called the Lytierſe, ſo called from the ſon of Midas, who took a pleaſure in that employment. The ſong of the millers, called Hymee, or Epiaulia, as this taken from Plutarch, " Grind, Mule, grind, for Pittacus, who reigns " in ſplendid Mitylene, delights in eating," becauſe Pittacus was a great Glutton. The ſong of the weavers, which was called Eline; the yule ſong of the wool-carders; that of the nurſes, which was called Catabaucaleſis, or Nunnia; the ſong of lovers,

lovers, called Nomion; that of the ladies, called Calyce; and Harpalyce, that of young girls. Theſe two ſongs, by changing the ſex, became alſo ſongs of love.

For particular occaſions, they had the marriage ſong, called Hymenæa, Epithalamium; the ſong of Datis on merry occaſions; for lamentations, the Jaleme; and Linos for funerals, and other mournful occaſions. This Linos was ſung alſo by the Ægyptians, and called by them Maneros, from the name of one of their princes, at whoſe burial it had been ſung. By a paſſage of Euripides, cited by Athenæus, we may ſee that the Linos alſo might expreſs joy.

Laſtly, there were alſo hymns or ſongs in honour of the gods and heroes. Such were the Jule's of Ceres and Proſerpine; the Philælia of Apollo; the upinges of Diana, &c.

This genus paſſed from the Greeks to the Latins, and ſeveral odes of Horace are gallant or bacchic ſongs. But this nation, more warlike than ſenſual, made, for a long time, but a trifling uſe of muſic and ſongs, and never approached on this point to the graces of the Greek.

It ſeems that muſic always remained rough and diſcordant amongſt the Romans. What they ſung at marriages, was rather a clamour than ſongs; and it cannot be preſumed, that the ſatyrical ſongs of the ſoldiers, at the triumph of their generals, had a very agreeable melody.

The moderns have their ſongs alſo of different kinds, according to the genius and taſte of each nation. But the French bore off the palm from the reſt of Europe, in the art of compoſing them; if not for the turn and melody of the airs, at leaſt for their wit, the grace and ingenuity of the words, tho' in general the wit and ſatyr, ſhew much better than the ſentiment in ſuch a compoſition. They pay more attention to this amuſement, and have ever excelled in it. This happy people are always gay, turning every thing into merriment: their ladies are very gallant; the gentlemen very diſſipated; and the country produces excellent wine. How can they then refrain from continually ſinging? We have ſtill ſome ancient ſongs of Thibault, Comte de Champagne, the moſt gallant man of his time, ſet to muſic by Guillaume de Machault; Marot has made ſeveral which remain; and thro' favour of the airs of Orlando and Claudin, we have alſo ſeveral of the Pleyade of Charles IX. I ſhall make no mention of more modern ſongs, by which the muſicians, Lambert, du Bouſſet, la Garde, and others, have gained a name; and amongſt whom we find as many poets as there are *Gens de Plaiſir*, in a nation which is given moſt to it, though not all ſo celebrated as le Comte de Coulanges, & l'Abbe de Lattaignant. Neither have Provence and Languedoc

guedoc degenerated from their firſt talents. We ſee in theſe provinces an air of gaiety reign throughout, which inceſſantly invites the people to ſinging and dancing. One of Provence, they ſay, menaces his enemy with a ſong, as an Italian would attack his with a rapier. Other Countries have alſo their provinces for ſinging. In Great-Britain, it is Scotland; in Italy, it is Venice.

Our ſongs are of ſeveral ſorts, but in general on Love or Wine, or ſometimes on Satyr. The love ſongs are, the tender airs which are alſo called ſerious; the romances, whoſe character is to move the ſoul inſenſibly by the tender and lively recital of ſome amorous and tragic hiſtory; the paſtoral and ruſtic ſongs, many of which are made for dancing, as the Muſettes, the Gavots, &c.

The drinking ſongs are generally airs of baſs, or ſemi-breves for the table. It is with great reaſon that few are made for the treble, for there is not a viler and more diſguſting idea of debauchery than a drunken woman.

In regard to ſatyric ſongs, they are comprized under the name of Vaudevilles, and dart their rays indifferently on vice and virtue, by rendering them equally ridiculous; which ought to proſcribe the vaudeville from the lips of perſons of morality.

We have alſo a kind of ſong which is called parody. Theſe are words adjuſted as we can, on airs of the violin, or other inſtruments, and which are rhymed either well or ill, without paying attention to the meaſure of the verſes, or to the character of the air, or to the ſenſe of the words, or even often to common delicacy. (Vide Parody.)

SONOROUS. Which renders a ſound, "A ſonorous metal" From thence, "A ſonorous body". (Vide corpo ſonoro.)

Sonorous is ſaid particularly, and with excellence of all that renders mellow, ſtrong, clear, juſt ſounds, and well tuned. "A ſonorous bell" &c.

SOTTO VOCE. This Italian word ſpecifies, in the places in which it is written, that we muſt only ſing a demi-voix, or play only a *demi jeu*. Mezzo forte, and mezza voce, ſignify the ſame thing.

SOUND. When the agitation communicated to the air by the colliſion of a body ſtruck by another, reaches as far as the auditive organ, it produces a ſenſation called noiſe. But there is a reſounding noiſe called ſound. Searches on the abſolute ſound belong to the phyſician. The muſician examines only the relative ſound. He only examines by ſenſible modification, and it is according to this laſt idea, that we enquire into it in this article.

There are three principal objects to be conſidered in the ſound; the tone, the force, and the modification. Under each of theſe relations the ſound is conceived as modifiable. Firſt from flat to

ſharp; ſecondly from ſtrong to weak; thirdly from ſharp to ſweet, or from the dull to the lively, and ſo reciprocally.

I firſt ſuppoſe, that whatever may be the nature of the ſound, that its vehicle is the air itſelf; in the firſt place, becauſe the air is the only intermediary body of the exiſtence, which we are perfectly aſſured of, between the ſonorous body, and the auditive organ: ſince we muſt not multiply the beings without a neceſſity; as the air is ſufficient to explain the formation of the ſound; and, moreover, becauſe experience teaches us, that a ſonorous body renders no ſound in a place quite deprived of air.

If we would imagine another fluid, we may eaſily apply to it all that I have ſaid on the air in this article.

The reſonance of the ſound, or to ſpeak more clearly, its permanence and prolongation, can ariſe only from the duration of the agitation of the air. As long as this agitation continues, the ſhaken air inceſſantly ſtrikes the auditive organ, and by this means prolongs the ſenſation of the ſound.

But there is not a more ſimple method of conceiving this duration, than by ſuppoſing in the air vibrations which ſucceed each other, and thus renew the impreſſion every inſtant. Moreover, this agitation of the air, of whatever kind it may be, cannot be produced but by a ſimilar agitation in the parts of the ſonorous body. Moreover, it is a certain fact, that the parts of the ſonorous body undergo ſuch vibrations. If we touch the body of a violincello at the time we draw the ſound, we feel it ſhake under our hand, and we ſee very ſenſibly, the vibrations of the chord continue till the ſound is extinguiſhed.

It is the ſame thing with a bell, which we make ſound by ſtriking it with the clapper; we feel it, we ſee it even ſhake, and we perceive the grains of ſand leap up, which are thrown on the ſurface.

If the chord looſens, or the bell burſts, there is more ſhaking and more ſound. If then, neither this bell nor this chord can communicate to the air any movements, but what themſelves have, we cannot doubt, but that the ſound produced by the vibrations of the ſonorous body, extends itſelf by ſimilar vibrations which this body communicates to the air.

All this being ſuppoſed, let us firſt examine what conſtitutes the relation of ſounds from flat to ſharp.

I. Theon, of Smyrna, ſays that Laſus of Hermione, as well as the Pythagorean Hyppaſes of Metapont, to calculate the relation of conſonances, made uſe of two ſimilar veſſels, which reſounded in uniſon. That leaving one of theſe empty, and filling a quarter of the other, the percuſſion of each produced the conſonance of a fourth; that, then filling the ſecond a third, then again the half,

the

the percuſſion of the ſecond had produced the conſonance of the fifth, then of the octave.

Pythagoras, according to Nichomachus and Cenſorinus, managed in another manner, the calculation of the ſame connections. He ſuſpended, they ſay, different weights to the ſame ſonorous chords, and determined the references of the different ſounds, on thoſe which he found between the hanging weights; but the calculations of Pythagoras are too juſt to have been made in this manner; ſince every one knows at preſent on the experience of Vincent Galilæus, that the ſounds are together, not as hanging weights, but in the ſub-double computation of theſe ſame weights.

Laſtly, was invented the monochord, called by the ancients Canon Harmonicus, becauſe it gave the rule of harmonic diviſions. We muſt explain its principles.

Two chords of the ſame compoſition equal, and equally extended, form a perfect uniſon in every ſenſe. If the lengths are unequal, the ſhorteſt will give a ſharper ſound, and make more vibrations in a given time; from whence we may conclude that the difference of ſounds from ſharp to flat, proceeds only by that of vibrations formed in the ſame ſpace of time, by the chords or ſonorous bodies which make them heard: wherefore we expreſs the connections of ſounds by the numbers of vibrations which give them.

We alſo know, by as certain experience, that the vibrations of the chord, equal in every other reſpect, are always reciprocal in the lengths. So the double chord of another, will make, at the ſame time only the half of the number of vibrations of the latter, and the relation of the ſounds, which they will cauſe to be heard is called octave. If the chords are as 3 to 2, the vibrations will be as 2 to 3, and the connection of the ſounds will be called fifth, &c. (Vide Interval.)

We ſee by this means, that with moveable bridges it is eaſy to form on a ſingle chord, the diviſions which produce ſounds in all poſſible connections, whether together, or with the entire chord. This is the monochord which I have juſt mentioned. (Vide Monochord.)

We may render ſharp or flat ſounds by other means; two chords of equal length do not always form the uniſon, for if the one is greater or leſs extended than the other, it will form leſs vibrations in equal times, and conſequently, will give a ſharper ſound. (Vide chord.)

It is eaſy to explain on theſe principles the conſtruction of chord inſtruments, ſuch as the Harpſichord, and the playing of Violins or Baſſes, which by the different impreſſion of the fingers or moveable bridges on the chords, produces the diverſity of ſounds drawn from

from thoſe inſtruments. We muſt reaſon in the ſame manner for the wind inſtruments. The holes, as in the flute and haut-boy, ſerve to ſhorten them, to render the ſound more ſharp. In giving more wind, they are made to octave, and the ſound becomes ſtill ſharper. The column of air forms the ſonorous body, and the different tones of the trumpet and french-horn, have the ſame principles as the harmonious ſounds of the violincello and violin, &c. (Vide harmonic ſound.)

If we make one of the grand chords of a violin or violincello reſound with ſome force, in paſſing the fiddle-ſtick rather nearer to the bridge than ordinary, we ſhall hear diſtinctly, however little our ear may be exerciſed or attentive, beſides the ſound of the entire chord, at leaſt that of its octave, that of the octave of its 5th, and that of the double octave of its third; we ſhall even ſee ſhake and reſound all the chords, aſcending to the uniſon of thoſe. Theſe acceſſary ſounds always accompany any ſound whatſoever, but when this principal ſound is ſharp, the other are leſs ſenſible.

We call theſe the harmonies of the principal ſound; it is by them, according to Monſ. Rameau, that every ſound is appreciable, and 'tis in them that himſelf and Monſ. Tartini, have ſought the principle of all harmony, but by routs directly oppoſite. (Vide harmonic ſyſtem.)

One difficulty which remains to be explained in the theory of the ſound, is to know how two or more ſounds may be heard at the ſame time. When we hear, for inſtance, the two ſounds of the fifth, one of which forms two vibrations, whilſt the other makes three, we cannot well conceive how the ſame maſs of air may furniſh at the ſame time theſe different numbers of vibrations diſtinct from each other; and ſtill leſs, when it makes more than two ſounds together, and that they are all diſſonant with each other.

Mengoli and others manage the buſineſs by compariſons. It is the ſame thing, ſay they, as with two ſtones thrown in the water at the ſame time, and whoſe different circles lie croſs ways without confounding each other. Monſ. de Mairan, gives a more philoſophical explanation. The air, according to him, is divided into particles of different ſizes, each of which is capable of a peculiar tone, and ſuſceptible of no other; ſo that in every ſound which is formed, the particles of air analogous to it only, are ſhaken, thoſe and their harmonies, whilſt all the reſt remain tranquil, till moved in their turn by ſounds correſpondent to them. So that we hear at the ſame time two ſounds, as we ſee two colours; becauſe, being produced by different parts, they affect the organ in different points.

This ſyſtem is ingenious, but the imagination is with difficulty united to the infinity of the particles in the air, differing in ſize, and mobility,

mobility, which ought to be expanded in each point of the ſpace, to be always ready on neceſſity, to render an infinity of all the poſſible ſounds in every place. When they are once arrived at the drum of the ear, we have ſtill leſs conception, how, in ſtriking ſeveral together, they can produce a ſhake capable of conveying the ſenſation of each in particular to the brain. It appears, that this difficulty has been rather removed than reſolved. They alledge in vain the example of light, whoſe rays meet in a point without confounding the objects; for, beſides that one difficulty is not reſolved by another, the ſimile is not exact, ſince the object is ſeen without exciting in the air a movement ſimilar to that which a ſonorous body muſt occaſion to be heard. Mengoli ſeems deſirous of preventing this objection, by ſaying that the maſſes of the air, charged, as it were, with different ſounds, ſtrike the drum only ſucceſſively, alternatively, and each in its turn, without paying too great attention, how he ſhould employ thoſe, which are obliged to wait till the firſt have diſcharged their office; or without explaining how the ear, ſtruck with ſo many ſucceſſive impreſſions, can diſtinguiſh thoſe which belong to each ſound. In regard to the harmonies which accompany any ſound ſoever, they offer rather a new caſe of the precedent difficulty, than a ſeparate embarraſſment; for as ſoon as it is explained how many ſounds may be heard at a time, we may eaſily explain the phœnomena of harmonics. For inſtance, let us ſuppoſe that a ſound puts in motion the particles of air ſuſceptible of that ſame ſound, and the particles ſuſceptible of ſharper ſounds, ad infinitum, from theſe different particles, there will then be ſounds, whoſe vibration beginning and finiſhing exactly with the ſonorous body, will be continually aided and renewed by thoſe of the other; theſe particles will be thoſe which give the uniſon. Next comes the octave, whoſe two vibrations concording with one of the principal ſounds, are aſſiſted and enforced by it from two to two: conſequently, the octave will be ſenſible, but leſs than the uniſon. Then comes the twelfth, or octave of the fifth, which forms three preciſe vibrations, whilſt the fundamental ſound makes one; wherefore, receiving a freſh ſtroke only at each third vibration, the twelfth will be leſs ſenſible than the octave, which receives this freſh ſtroke at the ſecond. By following the ſame gradation, we find the concourſe of vibrations more ſlow, the ſtrokes leſs renewed, and conſequently the harmonies always leſs ſenſible, until the references are compoſed to that point; that the idea of the concurrence not ſufficiently frequent, be effaced, and the vibrations having the time to be extinguiſhed before they are renewed, the harmonic is no longer heard at all.

Laſtly, when the reference ceaſes to be rational, the vibrations no longer concur. Thoſe of the ſharper ſound, always contrary,

are

are very ſoon ſtifled by thoſe of the chord, and this ſharp ſound is abſolutely diſſonant and null.

Such is the reaſon why the firſt harmonies are heard, and all the reſt are not ſo. But I have written already too much on the firſt quality of the ſound. Let us now paſs on to the reſt.

II. The force of the ſound depends on that of the vibrations of the ſonorous body, the more theſe vibrations are ſtrong, the more vigorous the ſound is, and is heard at the greater diſtance. When the chord is ſufficiently extended, and the voice or inſtrument not too much forced, the vibrations always remain iſochronous, and conſequently the tone continues the ſame, whether we ſtrengthen or weaken the ſound; but in ſtriking too forcibly with the bow, in-ſlackening the chord too much, in ſinging too high, we may make the vibrations loſe the neceſſary iſochroniſm for the identity of the tone; and this is one of the reaſons, why, in the French muſic, wherein the grand merit is to ſcream, we are more ſubject to ſing falſe than in the Italian, where the voice is moderated with more ſweetneſs.

The quickneſs of the ſound, which would ſeem to depend on its force, does not ſo. This quickneſs is always equal, and conſtant, unleſs accelerated or retarded by the wind; that is to ſay, that the ſound, ſtrong or weak, will be always uniformly extended; and in two ſeconds will always go twice the diſtance it would do in one. According to Halley and Flampſtead, the ſound in England goes 1070 French feet in a ſecond, and at Peru, 174 fathoms, according to Monſ. de la Condamine. P. Merſenne, and Gaſſendi have aſ-ſured us that a favourable or contrary wind neither accelerates or retards the ſound; but ſince the experience that Derham and the Academy of Sciences have made on this ſubject, this paſſes as an error.

Without ſlackening the motion the ſound is weakened in extend-ing itſelf, and this weakening, if the propagation is free, if it is not prevented by any obſtacle, or ſlackened by the wind, ordinarily follows the reaſon of the ſquare of diſtances.

III. In regard to the difference, which is found alſo between the ſounds by the quality of the modification, it is evident, that it holds neither to the degree of elevation, nor even to that of the force. It will be in vain for a hautboy to place itſelf in uniſon with a flute, it will be in vain to ſweeten the ſound to the ſame degree. The ſound of the flute will always have, a *je ne ſais quoi* of mellow and ſweet, that of the hautboy ſomething rude and ſharp, which will prevent the ear from confounding them; without mentioning the diverſity of the modification of the voice. (Vide Voice.)

There is not an inſtrument which has not its peculiar tone, which has no connection with that of another, and the organ alone has twenty

twenty methods of playing all of a different modification. No one, however, that I know of has examined the ſound in this particular; which as well as the reſt will perhaps be found to have ſome difficulties; for the quality of the modification cannot depend, either from the number of vibrations, which forms the degree from flat to ſharp, or from the greatneſs or force of theſe ſame vibrations, which forms the degree from ſtrong to weak. We muſt then find in the ſonorous body a third different cauſe from theſe two, to explain this third quality of the ſound, and its differences; which perhaps, is not too eaſy.

The three principal qualities which I have mentioned enter all, though in different proportions, into the object of muſic, which is ſound in general.

In effect, the compoſer does not only conſider if the ſound which he uſes ought to be high or low, flat, or ſharp, but if they ought to be ſtrong or weak, diſguſting or ſweet, dull or pleaſing: and he diſtributes them to different inſtruments and different voices, in recitatives or choruſſes, at the extremities or in the medium of the inſtruments or voices, with the dolce and forte, according as theſe are ſuitable.

But it is true, that it is only in the compariſon of ſounds from flat to ſharp, that the whole harmonic ſcience conſiſts; ſo that, as the number of ſounds is infinite, we may ſay in the ſame ſenſe, that this ſcience is infinite in its objects. We conceive no preciſe ſounds to the extent of ſounds from flat to ſharp, and however ſmall the interval may be, which is between two ſounds, we ſhall always conceive it diviſible by a third ſound; but nature and art have limited this infinity in the practice of muſic. We very ſoon find in inſtruments, the bounds of practicable ſounds, as well in flat as in ſharp. Lengthen or ſhorten a ſonorous chord to a certain point, it will have no more a ſound. We can neither augment or diminiſh, at will, the capacity of a flute, or the pipe of an organ, neither its length. There are bounds paſſed which neither can any longer reſound. The breathing has alſo its meaſure and its laws. When too weak, it renders no ſound, when too ſtrong, it produces only a piercing cry, which it is impoſſible to appreciate. Laſtly, it is agreed, by a thouſand experiences, that all ſenſible ſounds are confined within a certain latitude, paſſed which, either too flat or too ſharp, they are no longer perceived, or become inappreciable to the ear. Monſ. Euler has, in ſome reſpects, fixed its limits; and according to his obſervations, ſhewn by Monſ. Diderot, in his principles of the acouſtic, all ſenſible ſounds are comprized between the numbers 30 and 7552; that is to ſay, that, according to this great geometrician, the flatteſt ſound perceptible to the ear forms 30 vibrations a ſecond, and

and the ſharpeſt 7552 vibrations at the ſame time; an interval, which nearly comprehends eight octaves.

On the other hand, we ſee by the harmonic generation of ſounds, that amidſt their infinity, there are very few which can be admitted into the harmonious ſyſtem. For all thoſe which do not form conſonances with the fundamental ſounds, or which do not ariſe mediately or immediately, from the differences of theſe conſonances, ought to be proſcribed from the ſyſtem. This is the reaſon, that however perfect ours may be ſuppoſed at preſent, it is however bounded to twelve ſounds only in the extent of an octave; from which twelve, all the other octaves contain no more than repliques. If we chuſe to reckon all theſe repliques for ſo many different ſounds, in multiplying them by the number of octaves, to which the extent of appreciable ſounds is confined, we ſhall find ninety-ſix in all, as the greateſt number of practicable ſounds in our muſic on the ſame fundamental ſound.

We could not reckon, with the ſame preciſion, the number of ſounds practicable in ancient muſic. The Greeks formed, as it were, as many ſyſtems of muſic as they had different methods of tuning their tetrachords. It appears, by reading their treatiſes of muſic, that the number of theſe methods was great, and perhaps undetermined. Moreover, each particular concord changed the ſounds of half the ſyſtem, that is, of two moveable chords in each tetrachord. So that we plainly ſee, that they had ſounds in a ſingle method of concord; but we cannot juſtly calculate how much this number was multiplied in all the changes of genus and mode which introduced new ſounds.

In regard to their tetrachords, they diſtinguiſhed the ſounds into two general claſſes, viz. the ſtable and fixed ſounds, whoſe concord never changed; and the moveable ſounds, whoſe concord changed with the nature of the genus. The firſt were eight in all, viz. the two extremes of each tetrachord, and the chord proſlambanomenos; the ſecond were alſo at leaſt eight in number, ſometimes nine or ten, becauſe two adjoining ſounds were ſometimes confounded in one, and ſometimes ſeparated.

In the pycni genera, they divided the ſtable ſounds into two kinds; one of which contained three ſounds, called apycni, becauſe they formed neither ſemi-tones, or ſmaller intervals in flat; theſe three ſounds apycni, were the proſlambanomenos, the nete ſynnemenon, and the nete hyperboleon. The other kind took the name of ſounds barypycni, becauſe they formed the flat of the ſmaller intervals: The ſounds barypycni were five in number, viz. the hypate hypaton, the hypate meſon, the meſis, the paramеſis, and the nete diezeugmenon.

The

the moveable tones were ſubdivided in the ſame manner into meſophycni ſounds, which were alſo five in number, viz. The ſecond in aſcending of each tetrachord; and in five other ſounds called oxiphycni, which were the third in aſcending of each tetrachord. (Vide Tetrachord.)

In regard to the twelve ſounds of the modern ſyſtem, their concord never change, and they continue immoveable. Broſſard pretends, that they are all moveable, founding it on their being to be changed by dieſis or B flat; but it is one thing to change the chord, and another to change the concord of the chord.

FIXED SOUND. To have what we call a fixed ſound, we muſt be aſſured, that this ſound would always be the ſame, in all times and in all places. Moreover, we muſt not think it ſufficient for this purpoſe, to have a pipe, for inſtance, of a determined length; for firſt, the pipe always continuing the ſame, the weight of the air will nevertheleſs change; the ſound will alter and become flatter or ſharper according as the air is lighter or heavier. For the ſame reaſon, the ſound of the ſame pipe will again change with the column of the atmoſphere, according as this ſame pipe is raiſed or lowered, in mountains or in vallies.

In the ſecond place, this pipe, whatever may be its compoſition, will be ſubject to the variations that heat and cold cauſes in the dimenſions of every body. The pipe ſhortening or lengthening itſelf, will become proportionally ſharper or flatter; and from theſe two combined cauſes, comes the difficulty of having a fixed ſound, and the almoſt impoſſibility of being aſſured of the ſame ſound, in two places at the ſame time, or twice in the ſame place.

If we could reckon exactly the vibrations which a ſound makes in a given time, we might, by the ſame number of vibrations, be aſſured of the identity of the ſound; but this calculation being impoſſible, we can only certify the identity of the ſound by that of the inſtruments which give it, viz. The pipe, in regard to its dimenſion; and the air, as to its weight. Monſ. Sauveur propoſed, for this purpoſe, a method, which by experience did not ſucceed. Monſ. Diderot has ſince propoſed ſome more practicable, and which conſiſts in graduating a pipe of a ſufficient length, that its diviſions may be juſt and ſenſible, in compoſing it by two moveable parts, by which it may be lengthened or ſhortened, according to the dimenſions proportional to the alterations of the air, expreſſed by the thermometer, in regard to their temperature, and by the barometer as to their weight.

Vide the principles of acouſtic by that author to form a judgment of it.

FUNDAMENTAL SOUND. A fundamental ſound is that which ſerves as a foundation to the concord. (Vide Concord,) or to the tone. (Vide Tone.)

Fundamental baſs, is that which ſerves as a foundation to harmony. (Vide Fundamental Baſs.)

A fundamental concord is that whoſe baſs is fundamental, and whoſe ſounds are arranged according to the order of their generation; but as this order removes the parts extremely, we connect them by combinations or variations, and provided that the baſs continues the ſame, the concord does not on that account fail to bear the name of fundamental.

Such is, for inſtance, this concord ut mi ſol, confined in an interval of 5th, whereas in the order of its generation ut ſol mi, it comprehends a 10th, and even a 17th, ſince the fundamental ut is not the 5th of ſol, but the octave of that 5th.

HARMONIC SOUNDS. A ſingular kind of ſounds, which are drawn from certain inſtruments, ſuch as the violin and the violincello, by a particular motion of the fiddle-ſtick, which is drawn nearer to the bridge, and the finger lightly placed on certain diviſions of the chord. Their ſounds are very different for their modifications and for the tone, from what they would be, if the finger was conſtantly fixed. In regard to the tone, for inſtance, they will give the 5th, when they would have given the 3d, the 3d, when they would give the 6th, &c. As to the modifications, they are much ſweeter than thoſe which are drawn full from the ſame diviſion, by carrying the chord towards the ſleeve, and on account of this ſweetneſs, they are called fluted ſounds. One muſt, to have a clear judgment of them, have heard Monſ. Mondonville draw on his violin, or Monſ. Bertaud on his violincello, the conſequences of theſe beautiful ſounds. By ſliding the finger ſlightly from ſharp to flat, from the middle of a chord which we touch at the ſame time with the bow in the aforeſaid manner, we hear diſtinctly a ſucceſſion of harmonic ſounds from flat to ſharp; which very much aſtoniſhes thoſe unſkilled in the theory of them.

The principle on which this theory is founded, is, that a chord being divided into two commenſurable parts together, and conſequently with the entire chord, if the obſtacle which is placed at the point of diviſion hinders only imperfectly the communication of vibrations from one part to another, every time that the chord is ſounded in this ſtate, it will not render the ſound of the entire chord, nor that of its greater part, but that of the ſmaller part, if it meaſures exactly the other; or, if it does not meaſure it, the ſound of the greateſt aliquot common to theſe two parts.

Let a chord 6 be divided into two parts 4 and 2, the harmonic ſound will reſound by the length of the ſmall part 2, which is aliquot of the greater part 4; but if the chord 5 is divided by 2 and 3, then as the ſmall part does not meaſure the greater, the harmonic ſound will only reſound, according to the half 1 of this

ſame

ſame ſmaller part, which half is the greateſt common meaſure of the two parts 3 and 2, and of the whole chord 5.

By means of this law drawn from obſervation, and conformable to the tryals made by Monſ. Sauveur, at the Academy of Sciences, all the marvellous diſappears. With a very ſimple calculation, we aſſign to each degree the harmonic ſound which anſwers to it. In regard to the finger ſliding the length of the chord, it gives only a continuance of harmonic ſounds, which ſucceed each other rapidly in the order they ought to have according to that of the diviſions on which we paſs the finger ſucceſſively, and the points which form no exact diviſions, or which form thoſe that are too compoſed, give no ſenſible or appreciable ſound.

*A Table of Harmonic Sounds ſenſible and appreciable on the Violincello.*

| | | |
|---|---|---|
| The chord á vidi | gives | The uniſon. |
| The minor third | | The 19th or double octave of the fifth. |
| The major third | | The 17th or double octave of the ſame major third. |
| The fourth | | The double octave. |
| The fifth | | The 12th or octave of the ſame fifth. |
| The minor ſixth | | The triple octave. |
| The major ſixth | | The 17th major or double octave of the third. |
| The octave | | The octave. |

We here find a table of harmonic ſounds, which may facilitate the ſearch of them, to thoſe who deſire to practice them. The firſt column denotes the ſounds which the diviſions of the inſtruments would render when touch'd in full; and the ſecond, the fluted ſounds correſponding when the chord is harmonically touch'd.

After the firſt octave, that is, after the middle of the chord, advancing towards the bridge, we again find the ſame harmonic ſounds in the ſame order, on the ſame diviſions of the ſharpeſt octave, that is, the nineteenth on the minor tenth, the ſeventeenth on the major tenth, &c.

I have made, in this table, no mention of the harmonic ſounds relative to the ſecond and ſeventh; firſt, becauſe the diviſions which form them, having only very ſmall aliquots together, would render their ſounds too ſharp to be agreeable, and too difficult to be drawn by the ſtroke of the fiddle ſtick; and moreover, becauſe one muſt enter into the ſub-diviſions too much extended, which cannot be admitted but in practice; for the harmonic ſound of the major tone would be the twenty-third, or the triple octave of the ſecond; and the harmonic of the minor tone would be the twenty-fourth, or triple octave of the minor third: But what ear

is fine enough, and what hand ſufficiently juſt, to diſtinguiſh and touch, at will, a minor or a major tone?

The whole play of the marine-trumpet is in harmonic ſounds, which is the reaſon that we cannot draw every kind of ſound from it with eaſe.

TO SOUND. We ſay, in compoſition, that a note ſounds on the baſs, when it enters into the concord and forms a harmony, allowing the difference of the notes, which are thoſe of taſte, and ſerve only to figure, but have no ſound. We alſo ſay, to ſound a note, or a concord, to expreſs the ſtriking or cauſing a ſound to be heard, the harmony of that note or that concord.

SOURDINE. A ſmall inſtrument of copper or ſilver, which is applied to the bridge of a violin or violincello, to render the ſounds weaker, by intercepting and preventing the vibrations of the entire body of the inſtrument. The ſourdine, by weakening the ſounds, changes their modification, and gives them an exceeding moving and mournful character. The French muſicians, who think that a ſweet play produces the ſame effect as the ſourdine, and who do not admire the trouble of placing and diſplacing, make no uſe of it; but they make uſe of it with great effect in all the orcheſtras of Italy; and it is becauſe the word ſordini is found very often in their ſymphonies, that I have made an article of it. There are ſordini alſo for the French-horn, for the harpſichord, &c.

SPACE. A fair interval, or diſtance, which is found in the ſtave between a line, and that which follows it immediately above or below. There are four ſpaces in the five lines, and two beſides, the one above, the other below the entire ſtave: We find, when neceſſary, theſe two indefinite ſpaces, by additional lines added above or below, the which augment the extent of the ſtave, or furniſh new ſpaces. Each of theſe ſpaces divides the interval of two lines which terminate it, into two diatonic degrees, viz. one from the inferior line to the ſpace, and the other from the ſpace to the ſuperior line. (Vide Stave.)

SPICCATO. An Italian word, which, written on muſic, denotes ſtrong and well detached ſounds.

SPONDAULA. Was, amongſt the ancients, a player on the flute, or ſome other ſimilar inſtrument, who, while the ſacrifice was offered, played in the ear of the prieſt ſome ſuitable air, to prevent his liſtening to any thing which might interrupt him.

This word is formed from the Greek σπονδὴ, a libation, and αὐλὸς, a Flute.

SPONDIASM. Was, in the moſt ancient Greek muſic, an alteration in the harmonic genus, when a chord was accidentally elevated

elevated three dieſis's above its ordinary concord, ſo that the ſpondiaſm was preciſely the contrary to the Eclyſis.

STABLE. The ſtable chords or ſounds were, beſides the chord proſlambanomenos, the two extremes of each tetrachord, which extremes ſounding the diatepaſon or fourth together, the concord never changed, as did that of the chords in the middle, which were extended or ſlackened, according to the genera, and on that account were called moveable chords or ſounds.

STAVE. The ſtave or line of muſic is compoſed of five parallel lines, on or between which the different poſitions of the notes mark their intervals or degrees. The ſtave of church-muſic has only four lines: It formerly had eight, according to Kircher, each marked with a letter of the gamut; ſo that there was only one conjoint degree from one line to another: When the degrees were doubled, by placing notes in this manner in the intervals, the ſtave of eight lines being reduced to four, was found of the ſame extent as before.

To this number of five lines in muſic, and four in that of the church, are added, additional or accidental lines, when neceſſary, and the notes paſs the extent of the ſtave above or below. This extent, in a ſtave of muſic, is in the whole of eleven notes forming ten diatonic degrees, in church-muſic of nine notes forming eight degrees. (Vide Cleff, Notes, Lines.)

STOP. Is the termination of the phraſe, on which termination the air repoſes, more or leſs perfectly. The ſtop cannot be eſtabliſhed but by a full cadence; if the cadence is avoided, there can be no true ſtop: for it is impoſſible for the ear to repoſe on a diſſonance. We ſee by this means, that there are preciſely as many kinds of ſtops, as ſorts of full cadences (Vide Cadence,) and theſe different ſtops produce in muſic, the effect of the punctuation in diſcourſe.

Some confound, very improperly, the ſtops with the ſilences, tho' theſe two things are very different.

STRUCK. This is the time when the hand or foot is lowered, and when we beat to mark the meaſure. (Vide Theſis.) We ſtrike with the foot in general only the firſt time of each meaſure, but thoſe who cut in two, the meaſure of four, ſtrike alſo the third. In ſtriking the meaſure with the hand, the French never beat but in the firſt time, and mark the reſt by different movements of the hand; but the Italians ſtrike the two firſt of the meaſure of three, and raiſe the third. They ſtrike in the ſame manner the two firſt in the meaſure of four, and raiſe the two others. Theſe movements are more ſimple, and appear more convenient,

STYLE. The diſtinctive character of compoſition or execution. This character varies greatly, according to the countries, the taſte of

of the people, the genius of authors, &c. according to matter, place, ſubject, expreſſion, &c.

We ſay, in France, the ſtyle of Lully, of Rameau, of Mondonville, &c. In Germany, the ſtyle of Haſſe, of Gluck, of Graun. In Italy, the ſtyle of Leo, of Pergoleſis, of Jomelli, of Buranello. The ſtyle of church-muſic is not the ſame as that for the theatre or a private room. The ſtyle of German compoſitions is lively, divided, but harmonious. That of the French compoſition is flat, rough, ill cadenced, monotonous. That of the Italian compoſitions, flouriſhing, pleaſing, energetic.

The dramatic or imitative ſtyle is proper for exciting or painting the paſſions. The ſtyle of the church is ſerious, majeſtic, grave. The ſtyle of the Motet, where the artiſt affects to ſhew himſelf as ſuch, is more claſſic and ingenious, than energetic and affecting. The hyporchematic ſtyle is peculiar to joy, pleaſure, dancing, filled with lively movements, gay and well expreſſed. The ſymphonic or inſtrumental ſtyle. As every inſtrument has its touch, its fingering, its character peculiar to it, it alſo has its ſtyle. The meliſmatic or natural ſtyle, which is firſt preſented to perſons who have not yet ſtudied. The ſtyle of fantaſy, little united, filled with ideas, free from every conſtraint. The choraic or dancing ſtyle, which is divided into as many different branches as there are characters in dancing.

The ancients had alſo their different ſtyles. (Vide Mode and Melœpea.)

SUB-DOMINANT. A name given, by Monſ. Rameau, to the fourth note of the tone, which is, conſequently, in the ſame interval of the tonic in deſcending, as is the dominant in aſcending. This denomination happens from the affinity which this author finds by variation, between the minor mode of the ſub-dominant, and the major mode of the tonic. (Vide Harmony.)

SUB-MEDIANT. Is alſo, in Monſ. Rameau's Vocabulary, the name of the ſixth note of the tone. But this ſub-mediant, as it ought to be in the ſame interval of the tonic below, as is the mediant above, ſhould form a major third under this tonic, and conſequently minor third on the ſub-dominant, and it is on this analogy that the ſame Monſ. Rameau eſtabliſhes the principal of the minor mode; but it would follow from thence, that the major mode of a tonic, and the minor mode of its ſub-dominant, muſt have a great affinity; which is no ſuch thing: ſince, on the contrary, it is very ſeldom that we paſs from one of theſe two modes to another, and that the almoſt entire ſcale is altered by ſuch a modulation.

I may be deceived in the acceptation of theſe two precedent words, not having Monſ. Rameau's writings before me whilſt I write this article. He, perhaps, underſtands ſimply by ſub-dominant,

nant, the note, which is a degree below the dominant; and by ſub-mediant, the note which is a degree below the mediant. What keeps me in ſuſpenſe between theſe two ſenſes, is, that in each the ſub-dominant is the ſame note fa for the tone of ut, but it would not be the ſame thing with the ſub-mediant: It would be la in the firſt ſenſe, and re in the ſecond. The reader may verify which of the two is Monſ. Rameau's: what may be depended on, is, that what I have given is preferable for the uſe of compoſition.

SUBJECT. A term of compoſition. This is the principal part of the deſign, the idea which ſerves as a foundation to all the reſt. (Vide Deſign.)

All the other parts require only art and labuor: this depends only on the genius, and, tis in this, that invention entirely conſiſts. The principal ſubjects in muſic, produce Rondeau's, Imitations, Fugues, &c. (Vide thoſe Words.)

A barren and cold compoſer, after having diſcovered with difficulty ſome ſcattered ſubject, only turns it and changes it from modulation to modulation; but the artiſt who has fire, and a clear imagination, without ſuffering his ſubject to be forgotten, gives it a new air every time it is repreſented.

SUPERFICIES. A combination, either of the ſounds of a concord, beginning by one of thoſe ſounds, and taking the reſt according to their natural connection, or, from the touches of the keys which form the ſame concord. From whence it follows, that a concord may have as many ſuperficies as there are ſounds which compoſe it, for each may be the firſt in its turn.

The perfect concord ut mi ſol, has 3 ſuperficies. By the firſt all the fingers are ranged by thirds, and the tonic is under the index; by the ſecond mi ſol ut, there is a fourth between the two laſt fingers, and the tonic is under the laſt; by the third ſol ut mi, the fourth is between the index and fourth finger, and the tonic is under the latter. (Vide Variation.)

As the diſſonant accords have generally four ſounds, they have alſo four ſuperficies, which may be found with the ſame facility.

SUPERSUS. A name formerly given to trebles when they were very ſharp.

SUPERNUMERARY. Was the name of the loweſt chord in the Greek ſyſtem; they called it alſo in their language proſlambanomenos. (Vide that Word.)

SUPPOSITION. This word has two ſenſes in muſic. Firſt, when ſeveral notes aſcend or fall diatonically in a part on the ſame note of another part; theſe diatonic notes cannot then all form a harmony, or enter at the ſame time into the ſame concord. There are ſome then counted for nothing, and thoſe are the notes foreign to harmony which are called notes by ſuppoſition.

The

The general rule is, when the notes are equal, that all thoſe which ſtrike on the ſtrong time bear the harmony, thoſe which paſs on the weak time are notes of ſuppoſition, which are placed for the air only, and to form conjoint degrees. Take notice that by ſtrong and weak time, I underſtand leſs the principal times of the meaſure than the parts themſelves of each time. So, if there are two equal notes in a ſame time, it is the firſt which bears the harmony: the ſecond is of ſuppoſition. If the time is compoſed of four equal notes, the 1ſt and 3d bear the harmony, and the 2d and 4th are the notes of ſuppoſition, &c.

Sometimes this order is perverted: we paſs the firſt note by ſuppoſition, and we make the ſecond borne, but then the powers of this ſecond note are generally augmented by a point at the expence of the firſt.

All this always ſuppoſes a diatonic movement by conjoint degrees; for when the degrees are disjoint, there is no ſuppoſition, and all the notes ought to enter in the concord.

Secondly, we call concords by ſuppoſition, thoſe where the thorough baſs adds or ſuppoſes a new ſound below the fundamental baſs: which occaſions that ſuch concords always exceed the extent of the octave. The diſſonance of concords by ſuppoſition ſhould be always prepared by ſyncope's, and ſaved in deſcending diatonically on the ſounds of a concord, under which the ſame ſuppoſed baſs may act as fundamental baſs, or, at leaſt as thorough baſs. Which occaſions the concords by ſuppoſition, well examined, may all paſs as pure ſuſpenſions. (Vide Suſpenſion.)

There are three ſorts of concords by ſuppoſition. All are concords of the 7th: The firſt, when the added ſound is a third below the fundamental, ſuch is the concord of the 9th, if the concord of the 9th is formed by the mediant added below the ſenſible concord in the minor mode, the concord then takes the name of ſuperfluous 5th.

The ſecond kind is when the ſuppoſed ſound is a 5th below the fundamental, as in the concord of 4th, or 11th, if the concord is ſenſible and the tonic ſuppoſed, the concord takes the name of ſuperfluous 7th.

The third kind is that where the ſuppoſed ſound is below a concord of diminiſhed 7th, if it is a third below, that is, that the ſuppoſed ſound be the dominant, the concord is called concord of ſecond minor and third major. It is very little in uſe, if the ſound added is a fifth below, or that this ſound be the mediant, the concord is called concord of 4th, or ſuperfluous 5th, and if it is a 7th below, that is, the tonic itſelf, the concord takes the name of minor 6th and ſuperfluous 7th.

In

In regard to the variations of theſe different concords, where the ſuppoſed ſound is tranſported in the ſuperior parts, being admitted only by licence, they ought only to be practiſed with choice and circumſpection. We may find at the word concord all thoſe which may be tolerated.

SUSPENSION. There is ſuſpenſion in every concord on the baſs, from which we ſuſtain one or more ſounds of the precedent concord, before we paſs to thoſe which belong to it; as if, when the baſs paſſes from the tonic to the dominant, I prolong ſome moments on that dominant, the concord of the tonic which precedes it before, reſolving it on its own, it is a ſuſpenſion.

There are ſuſpenſions which are cyphered and enter into harmony.

When they are diſſonant, they are always concords by ſuppoſition, other ſuſpenſions are only of taſte; but whatever may be their nature, we ought always to ſubject them to the three following rules.

I. The ſuſpenſion ought always to be made on the ſtroke of the meaſure, or at leaſt on a ſtrong time.

II. It ought always to be diatonically reſolved, whether in aſcending or falling, that is, that each part, which has ſuſpended, ought not immediately to aſcend or fall, but a degree to arrive at the natural concord of the note of the baſs, which has borne the ſuſpenſion.

III. Every ſuſpenſion cyphered ought to be ſaved in deſcending, except the ſingle ſenſible note, which is ſaved in riſing.

By the method of theſe precautions there is no ſuſpenſion but what may be practiſed with ſucceſs, becauſe in that caſe the ear, preſenting on the baſs the movement of the parts, ſuppoſes beforehand the concord which follows. But it belongs to the taſte alone to chooſe and diſtribute, a propos, the ſuſpenſions in ſinging and harmony.

TO SUSTAIN. Is to make the ſounds continue exactly their whole powers, without ſuffering them to be extinguiſhed before the end, as muſicians very often do, and particularly ſymphoniſts.

SYLLABLE. This name has been given by ſome of the Ancients, and Nichomathus amongſt the reſt, to the conſonance of the fourth, which they commonly called diateſſaron. Which alſo proves by etymology, that they looked upon the tetrachord as we do on the octave, as comprehending all the radical or compoſed ſound.

SYMPHONIST. A compoſer of Church muſic. This term is become technical ſince it has been uſed by Monſ. L'Abbe le Beuf.

SYMPHONY, This word, formed from the Greek συν with, and φωνη ſound, ſignifies, in ancient muſic, that union of the ſounds

which form a concert. It is a ſentiment received, and, I believe demonſtrated, that the Greeks underſtood not the harmony in the ſenſe which we at preſent give to this word.

Their ſymphony formed no concords, but reſulted from the concurrence of ſeveral voices or inſtruments, or of inſtruments joined with the voice, ſinging or playing the ſame part. This was done two ways, where the whole concerted in uniſon, and the ſymphony was then more particularly called homophony, where the half of the concertants was in the octave, or even in the double octave of the other, and this was called antiphony. We find the proof of theſe diſtinctions in the problems of Ariſtotle, Section 19.

At preſent, the word ſymphony is applied to all inſtrumental muſic, as well for pieces which are deſtined only for inſtruments, as Sonata's and Concerto's, as for thoſe, where the inſtruments are found mixed with the voice, as in our Opera's, and in ſeveral ſorts of muſic. We diſtinguiſh vocal muſic into muſic without ſymphony, which has at leaſt a treble of inſtruments, violins, flutes, or hautboys. We ſay of a piece, that it is in grand ſymphony, when, beſides the baſs and treble it has alſo two other inſtrumental parts, viz. tenor, and 5th of the violin.

The muſic of the King's Chapel, that of ſeveral Churches, and of the Opera-Houſe, are almoſt always in grand ſymphony.

SYNAPHE. The conjunction of two tetrachards, or more preciſely the reſonance of 4th or diateſſaron, which is made between the homologous chords of two conjoint tetrachords. Wherefore, there are three ſynaphes on the ſyſtem of the Greeks. The one between the tetrachord of the hypates, and that of the meſis: the other, betwixt the tetrachord of the meſis and that of the conjoint, and the third between the tetrachord of the disjoint and that of the hyperboles. (Vide Syſtem, Tetrachord.)

SYNAULIA. A concert of ſeveral muſicians, who, in Ancient muſic, played and anſwered each other alternatively on flutes, without any union of the voice.

Monſ. Malcolm, who doubts whether the Ancients had a muſic compoſed only for inſtruments, does not fail to cite this ſynaulia from Athenæus, and he is in the right; for theſe ſynaulias were no more than a vocal muſic played by inſtruments.

SYNCOPE. A prolongation on the ſtrong time of a ſound begun on the weak time; wherefore, every ſyncopated note is in counter time, and every collection of ſyncopated notes is a movement in counter time.

We muſt take notice that the ſyncope does not exiſt leſs in harmony, tho' the ſound which forms it, inſtead of being continued ſhould be ſtruck by two or more notes, provided that the diſpoſition of theſe notes which repeat the ſame ſound, be conformable to the definition.

The

The ſyncope has its uſes in melody, for the expreſſion and taſte of ſinging, but its principal utility is in the harmony for the practice of diſſonances. The firſt part of the ſyncope ſerves for the preparation. The diſſonance is ſtruck on the ſecond, and in a ſucceſſion of diſſonances, the firſt part of the following ſyncope ſerves at the ſame time to ſave the diſſonance which precedes, and and to prepare that which follows.

Syncope is from σὺν with and κόπτω I cut, becauſe the ſyncope cuts off from each time, oppoſing, as it were with the other. Monſ. Rameau derives this word from the noiſe of the ſounds which knock againſt each other in ſome kind of diſſonance; but the ſyncopes are anterior to our harmony, and there are often ſyncopes without a diſſonance.

SYNNEMENON. Is the name which the Greeks gave to their third tetrachord, when it was conjoint with the ſecond, and divided from the fourth; when on the contrary, it was conjoint to the fourth and divided from the ſecond, this ſame tetrachord took the name of diezeugmenon. (Vide that Word.)

SYNNEMENON DIATONOS. Was, in Ancient muſic, the third chord of the tetrachord ſynnemenon in the diatonic genus, and as that third chord was the ſame as the ſecond of the tetrachord of disjoints, it bore alſo in this tetrachord the name of trite diezeugmenon. (Vide Trite, Syſtem, Tetrachord.)

This ſame chord, in the two other genera, bore alſo the name of the genus in which it was uſed, but then it was not confounded with the trite diezeugmenon. (Vide Genus.)

SYNTONIC. Is the epithet by which Ariſtoxenes diſtinguiſhes that of the two ſpaces of the ordinary diatonic genus, whoſe tetrachord is divided into a ſemi-tone and two equal tones; whereas in the flat diatonic, after the ſemi-tone, the firſt interval is three quarters of a tone, and the other five. (Vide Genus, Tetrachord.)

Beſides the ſyntonic genus of Ariſtoxenes, called alſo diatono diatonic, Ptolomy eſtabliſhes another, by which he divides the tetrachord into three intervals. The firſt of a ſemi-tone major; the ſecond of a tone major; and the third of a tone minor. This ſyntonic diotonic of Ptolomy remains, and it is alſo the only diatonic of Didymus, allowing this difference, that Didymus having placed this minor tone in flat, and the major tone in ſharp, Ptolomy varied that order.

We may ſee, with a caſt of the eye the difference of theſe two ſyntonic genera, by the connections of the intervals which compoſe the tetrachord in each.

The Syntonic of Ariſtoxenes $\frac{3}{20} + \frac{6}{20} + \frac{6}{20} = \frac{3}{4}$

The Syntonic of Ptolomy $\frac{15}{16} + \frac{8}{9} + \frac{9}{10} = \frac{3}{4}$

There were alſo other ſyntonics, and they reckoned 4 principal kinds, viz. The ancient, the reformed, the temperated, and the equal. But it is loſing time, and abuſing that of the reader, to examine every one of theſe diviſions

SYNTONO LYDIAN. The name of one of the modes in ancient muſic. Plato ſays, that the mixo-lydian modes and ſyntono-lydian are peculiar to tears.

We ſee in the firſt book of Ariſtides Quintilian a liſt of the different modes which we muſt not confound with the tones which bear the ſame name, and which I have ſpoken of at the word mode, to be conformable to the modern cuſtom introduced very improperly by Glarean. The modes were different methods of varying the order of intervals. The tones differed as at preſent by their fundamental chords. It is in the firſt ſenſe that we muſt underſtand the ſyntono lydian mode of which Plato ſpeaks, and of which, beſides, we have no other explanation.

SYSTEM. This word having ſeveral acceptations, will oblige me to render it a very long article.

To begin by the proper and technical ſenſe, I ſhall firſt ſay that the name of ſyſtem was given to every compoſed interval, or conceived as compoſed of other ſmaller intervals, which conſidered as the elements of the ſyſtem, are called diaſteme.

There are an infinity of different intervals, and conſequently an infinity alſo of poſſible ſyſtems. To confine myſelf here to ſomething real, I ſhall only ſpeak of the harmonic ſyſtems, that is of thoſe, whoſe elements are either conſonances, or differences of conſonances, or differences of thoſe differences. (Vide Interval.)

The ancients divided the ſyſtems into general and particular. They called *particular ſyſtem*, all that was compoſed at leaſt of two intervals; ſuch as are or may be conceived, the octave, the 5th, the 4th, the 6th, and even the third. I have ſpoken of the particular ſyſtems at the word interval.

The general ſyſtems, which were more commonly called diagrams, were formed by the ſum of all the particular ſyſtems, and conſequently comprehended all the ſounds uſed in muſic. I confine myſelf here to the examination of their ſyſtem in the diatonic genus; the difference of the chromatic and enharmonic being ſufficiently explained in their articles.

We

We ought to judge of the condition and progreſs of the ancient ſyſtem, by thoſe of the inſtruments deſtined for their execution.

For theſe inſtruments accompanying the voice in uniſon, and playing all which they ſung, muſt form as many different ſounds as there entered into the ſyſtem.

The chords of theſe firſt inſtruments were always touched, a vide, there were then as many chords neceſſary as the ſyſtem contained ſounds, and 'tis by this means that, ſince the origin of muſic, we may determine on the number of the chords of the inſtrument, the number of the ſounds in the ſyſtem.

The whole ſyſtem of the Greeks was at firſt compoſed only of four ſounds at the moſt, which formed the concord of their lyre or cithara. Theſe four ſounds according to ſome, were by conjoint degrees, according to others they were not diatonic; but the two extremes ſounded the octave, and the two middle divided it into a fourth on each ſide, and a tone in the middle, in the following manner;

Ut —— Trite Diezeugmenon
Sol —— Lichanos Meſon
Fa —— Parhypate Meſon
Ut —— Parhypate Hypaton

This is what Boetius calls the tetrachord of Mercury, tho' Diodorus advances that Mercury's lyre had only three chords. This ſyſtem did not long continue confined to ſo few ſounds. Chorebe, Son of Athis, King of Lydia, added a 5th chord; Hyagnis a 6th; Terpander a 7th to equal the number of the planets; and laſtly, Lychaon of Samos, an 8th.

This is what Boetius ſays: but Pliny ſays that Terpander having added three chords to the four ancient, played firſt on the cithara with 7 chords; that Simonides joined to it an 8th, and Timotheus a 9th. Nicomachus the Geraſinian attributes this 8th chord to Pythagoras, the 9th to Theophraſtus of Pieria, then a 10th to Hyſtæus of Colophon, and an 11th to Timotheus of Milet. Pherecrates in Plutarch makes a more rapid progreſs to the ſyſtem; he gives 12 chords to the ſyſtem of Menalippedes, and as many to that of Timotheus. And as Pherecrates was contemporary with this great muſician, ſuppoſing him effectually to have ſaid what Plutarch makes him ſay, his witneſſing is of great weight on a fact which he had before his eyes.

But how can we be aſſured of the truth amid ſo many contradictions, either in the doctrine of authors, or in the order of facts as they are reported? For inſtance, the tetrachord of Mercury evidently gives the octave on the diapaſon. How then could it be, that after the addition of three chords, the whole diagram ſhould be found diminiſhed a degree, and reduced to an interval of 7th?

This

This is however what the generality of authors would ſeem to underſtand, and amongſt the reſt Nicomachus, who ſays that Pythagoras finding the whole ſyſtem compoſed only of two conjoint tetrachords, which between their extremities formed a diſſonant interval, rendered it conſonant, in dividing theſe two tetrachords by the interval of a tone, which produced the octave.

However it be, it is a certain thing at leaſt, that the ſyſtem of the Greeks was inſenſibly extended as well above or below, and that it attained and even paſſed the extent of the dis-diapaſon or double octave, an extent which they called ſyſtema perfectum, maximum, immeſtatum, the grand ſyſtem, the perfect ſyſtem; ſo that betwixt its extremities, which formed together a perfect conſonance were contained all the ſimple conſonances, double, direct, and varied, all the particular ſyſtems, and according to them, the greateſt intervals which can have place in melody.

This entire ſyſtem was compoſed of four tetrachords, 3 conjoint, and 1 disjoint, and a tone beſides, which was added below all to compleat the double octave, from whence the chord which formed it, took the name of Proſlambanomenos or added. This could not, it ſeems have produced more than 15 ſounds in the diatonic genus; It has however formed 6. This is that the disjunction making itſelf perceived, ſometimes between the ſecond and third tetrachord, ſometimes between the third and fourth; it happened in the firſt caſe, that after the ſound la, the ſharpeſt of the ſecond tetrachord, followed in aſcending the ſi natural which began the third tetrachord; or, in the ſecond caſe, that this ſame ſound la beginning itſelf the third tetrachord, was immediately followed by ſi b flat; for the firſt degree of each tetrachord in the diatonic genus, was always of a ſemi-tone. This difference produced then a 16th ſound on account of the ſi, which was natural on one ſide, and b flat on the other.

The 16 ſounds were repreſented by 18 names; that is to ſay, that the ut and re being either ſharp ſounds, or the middle of the third tetrachord, according to theſe two caſes of disjunction, a name was given to each of theſe two ſounds which determined its poſition.

But as the fundamental ſound varied according to the mode, there followed from thence for the place which each mode occupied in the whole ſyſtem, a difference from flat to ſharp, which multiplied ſeveral ſounds; for if the different modes had ſeveral common ſounds, they had alſo ſome peculiar to each, or to a few only. So, in the ſingle diatonic genus, the extent of all the ſounds, admitted in the 15 modes, numbered by Alipius, is of three octaves; and, as the difference of the fundamental ſound of each mode, to that of its neighbour was only of a ſemi-tone, it is evident

dent that all this ſpace graduated from ſemi-tone to ſemi-tone, produced, in the general diagram, the quantity of 34 ſounds practiſed in the ancient muſic. If, deducing all the repliques of the ſame ſounds, we confine ourſelves within the bounds of an octave, we ſhall find it divided chromatically into 12 different ſounds, as in the modern muſic; which is manifeſted by the inſpection of the tables placed by Meibomius at the head of the work of Alipius.

Theſe remarks are neceſſary for eradicating the error of thoſe, who believe in the faith of ſome moderns, that ancient muſic was compoſed in the whole of 16 ſounds.

In regard to the enharmonic genera and chromatic, the tetrachords were therein found very well divided according to other proportions, but as they always contained equally 4 ſounds, and 3 conſecutive intervals, in the ſame manner as the diatonic genus, each of theſe ſounds bore the ſame name in their genus, which correſponded to them in the other; for which reaſon I have given no particular tables for each of theſe genera.

The curious may conſult thoſe which Meibomius has placed at the head of the work of Ariſtoxenes. We ſhall find 6, one for the enharmonic genus, 3 for the chromatic, and 2 for the diatonic, according to the diſpoſitions of each of theſe genera, in the Ariſtoxenian Syſtem.

Such was, in its perfection, the general ſyſtem of the Greeks, which remained nearly in this condition to the 11th century; the time, when Gui d' Arezzo made a conſiderable change. He added below a new chord which he called Hypoproſlambanomenos, or ſub-added, and above, a 5th tetrachord, which he called the tetrachord of the ſur-ſharp.

Beſides that, he invented, they ſay, the b flat neceſſary for diſtinguiſhing the ſecond chord of a tetrachord conjoint with the firſt chord of the ſame diſjoint tetrachord; that is to ſay, that he fixed that double ſignification of the letter B, which St. Gregory, before him, had already aſſigned to the note ſi. For ſince it is certain that the Greeks had, for a long time theſe ſame conjunctions and diſjunctions of tetrachords, and conſequently, ſigns to expreſs each degree in theſe two different caſes, it follows thence that it was not a new ſound introduced in the ſyſtem of Guy, but only a new name, which he gave to this ſound, reducing by this means to one ſame degree, what amongſt the Greeks formed two.

We muſt alſo ſay of theſe hexachords ſubſtituted in the place of their tetrachords, that it was leſs a change to the ſyſtem, than to the method, and that all which reſulted from it, was another method of ſol-faing the ſame ſounds. (Vide Gamut, To Sol-fa.)

We eaſily conceive that the invention of the counter-point, to whatever author it is due, muſt very ſoon draw back the bounds of this

this ſyſtem. Four parts ought to have more extent than one alone. The ſyſtem was fixed to four octaves, and this is the extent of the keys in all the ancient organs. But at laſt they found themſelves incommoded by limits, whatever ſpace they might contain, they went beyond them; they extended above and below; they formed keys a ravalement; they forced the voice; and at laſt gave ſo much extent to this ſyſtem, that it has no greater bounds than thoſe of the violin.

As we cannot even looſen to deſcend, the loweſt chord of the ordinary baſſes does not paſs the C ſol ut, but we ſhall equally find the method of obtaining on that ſide the tone of the general ſyſtem; that is even what they have begun to do, and I look on it as a certain thing, that in France the tone of the opera is lower at preſent than at the time of Lully. On the contrary, that of the inſtrumental muſic is aſcended as in Italy, and theſe differences become ſufficiently ſenſible to be perceived in practice.

In Plate II. Fig. I. Is given a table, of the entire ſet of keys a ravallement, and of all the ſounds contained therein in the extent of five octaves.

SYSTEM. Is alſo, either a method of calculation to determine the relations of ſounds admitted in muſic, or an order of ſigns eſtabliſhed to expreſs them. It is in the firſt ſenſe that the ancients diſtinguiſhed the Pythagorean ſyſtem, and the Ariſtoxenian. (Vide thoſe Words.)

It is in the ſecond that we at preſent diſtinguiſh the ſyſtem of Gui, that of Sauveur, of Demos, and Souhaiti, &c. of which I have ſpoken at the word note.

We muſt take notice that ſome one of theſe ſyſtems bear this name in either acceptation, as that of M. Sauveur, which gives at the ſame time, rules for determining the relations of ſounds and notes to expreſs them; as may be ſeen in the Memoirs of that author, expanded in thoſe of the Academy of Sciences. (Vide Merides, Eptamerides, Decamerides.)

Such is alſo another ſyſtem ſtill newer, which being in manuſcript, and perhaps never intended to be ſeen entirely by the Public, is deſerving to have an extract here, which has been communicated to us by the author Monſ. Roualle de Boiſgelou, counſellor to the grand counſel, already mentioned in ſome articles of this Dictionary.

The firſt thing neceſſary, is to determine the exact relation of the ſounds in the diatonic and chromatic genera, which being done in an uniform manner for the tones, conſequently diſperſes the modification.

The whole ſyſtem of Monſ. de Boiſgelou is ſummarily confined in the four formulæ which I am going to tranſcribe, after having put the reader in mind of the rules eſtabliſhed in different parts of this

this Dictionary on the method of comparing and compoſing the intervals, or relations which expreſs them. We muſt then remember, I. That to add one interval to another, we muſt compoſe its references ſi, for inſtance, adding the 5th $\frac{2}{3}$ to the 4th $\frac{3}{4}$, we have $\frac{6}{12}$ or $\frac{1}{2}$: that is, the octave

II. To add an interval to itſelf, we muſt only double its connection, ſo to add a 5th to another 5th, we muſt only raiſe the reference of the 5th to its ſecond power $\frac{2^2}{3^2} = \frac{4}{9}$.

III. To connect or ſimplify a redoubled interval, ſuch as this $\frac{4}{9}$, it is ſufficient to add the ſmall number to itſelf, one time or more: that is, to lower the octaves until the two terms, being as nearly connected as poſſible, give a ſimple interval. So from $\frac{4}{9}$, we have as a product of the redoubled 5th, the reference of the major tone, I will add, that in this dictionary, I have always expreſſed the connections of the intervals by thoſe of the vibrations, whereas Monſ. de Boiſgelou expreſſes them by the lengths of the chords, which renders its expreſſions inverſe to mine. So, the reference of the 5th by the vibrations, being $\frac{2}{3}$, is $\frac{3}{2}$ by the lengths of the chords. But we ſhall now ſee that this connection is approached only in the ſyſtem of Monſ. de Boiſgelou.

There are however the four formulæ of this author with their explanation.

Formulæ

A. $12\,f - 7\,r + t = o$

B. $12\,x - 5\,t + r = o.$

C. $7\,f - 4\,r + x = o.$

D. $7\,x - 4\,t + f = o.$

The Explanation.

Connection of the octave —— 2 — 1.
Connection of the 5th —— n — 1.
Connection of the 4th —— 2 — n.

Connection of the interval which comes from the 5th $\overset{r\ s}{n.\ 2.}$

Connection of the interval which comes from the 4th $\overset{s\ r}{2 - n.}$

r. The number of 5ths or 4ths of the interval.
s. The number of the combined octaves of the interval.
t. The number of semi-tones in the interval.
x. The diatonic gradation of the interval. That is the number of major and minor diatonic seconds of the interval.
$\frac{x+1.}{\quad}$ Gradations of the terms from whence the interval takes its name.

The first case of each formulæ is placed when the interval comes from 5ths. The second case of each formulæ is placed, when the interval is derived from 4ths.

To render this clearer by examples, let us begin by giving names to each of the 12 touches of the keys.

These names, in the arrangement of the keys proposed by Monſ. de Boiſgelou, are the following:

| | | | | | | |
|---|---|---|---|---|---|---|
| | de | ma | fa | ſol | la | ſi | |
| Ut | re | mi | ſi | be | ſa | ut |

Every interval is formed by the progreſſion of 5ths or 4ths, conveyed to the octave. For inſtance, the interval ſi ut is formed by this progreſſion of 5 fourths, ſi mi la re ſol ut, or by this progreſſion of 7 fifths, ſi ſi de be ma ſa fa ut.

In the ſame manner the interval fa la is formed by this progreſſion of 4 fifths, fa ut ſol re la, or by this progreſſion of 8 fourths, fa ſa ma be de ſi ſi ma la.

Since that the connection of every interval which is derived from 5ths, is $\overset{r\ s}{n : 2.}$ and that which comes from 4ths, is $\overset{s\ r}{2 : n.}$ it follows

follows from thence that we have for the connection of the interval ſi ut, when it comes from 4ths, this proportion $2^{s}—n^{r}—2^{3}—n^{s}$. This is the method of proving the analogy.

The number of 4ths from whence this interval ſi ut is derived, being 5, the connection of that interval is of $2^{5}—n^{5}$, ſince the connection of the 4th is $2 : n$.

But this connection $2^{5}—n^{5}$, would deſign an interval of $2^{5}$ ſemi-tones, ſince each 4th has five ſemi-tones, and that interval has 5 fourths. So, the octave having only 12 ſemi-tones, the interval ſi ut would paſs two octaves.

Then that the interval ſi ut may be leſs than the octave, we muſt diminiſh this reference $2^{5} : n.^{5}$ of two octaves; that is, of the connection of $2^{2} : 1$. Which is done by a connection compoſed of the direct reference $2^{5}—n^{5}$, and of the reference $1—2^{2}$ inverſe of that $2^{2}—1$, in this manner: $2^{5}+1. n^{5}+2^{2} :: 2. 2^{5} n^{2} :: 2^{5} : n^{3}$. The interval ſi ut, moreover coming from fourths, its connection, as I have ſaid before, is $2^{s} : n^{r}$. Then $2^{s} : n^{r} :: 2^{3} : n^{5}$. and again $s = 3$ and $r = 5$.

So, reducing the letters of the ſecond caſe of each formulæ to the correſpondent formulæ, we have for C $7s — 4r — x = 21 — 20 — 1 = 0$, and for D $7x — 4t — s = 7 — 4 — 3 = 0$.

When the ſame interval ſi ut, comes from 5ths, it gives this proportion $n^{r} : 2^{s} :: n^{7} : 2^{4}$. So, we have $r = 7$, $f = 4$, and conſequently, for the A of the firſt formulæ $12 — 7r — t^{s} = 48 — 49 + 1 = 0$. And for B. $12x — 56 + r = 12 — 5 — 7 = 0$.

In the ſame manner the interval fa la coming from 5th, gives this proportion $n^{r} : 2^{s} :: n^{4} : 2^{2}$, and conſequently we have $r = 4$ and $s = 2$. The ſame interval coming from 4ths, gives this proportion, $2^{s} : n^{r} :: 2^{5} : n^{8}$.

It would be too tedious to explain here the method of finding the connections, and the whole which concerns the intervals by the method of formulæ. It will be placing an attentive reader on the ramble, to give him the computation of n and of its powers.

WELSH COLLEGE OF LIBRARY

Computation of the Powers of n.

$n^4 = 5$ is an experienced truth.

Wherefore, $n^8 = 25$ $n^{12} = 125$, &c.

The preciſe Computations of the three firſt Powers of n.

$n = \sqrt[4]{5}$, $n^2 = \sqrt{5}$, $n^3 = \sqrt[4]{127}$.

The nearer Computations of the three firſt Powers of n.

$$m = \frac{3}{2}, \quad m^2 = \frac{3}{2}, \quad m^3 = \frac{3}{2}.$$

The connection $\frac{3}{2}$ then, which till now has been thought to have been that of the true 5th, is only a relation of approximation, and gives too ſtrong a 5th; and from thence the real principle of the modification; which is called ſo only through abuſe, ſince the 5th muſt be weak to be true.

Remarks on the Intervals.

An interval of a given number of ſemi-tones, has always two different connections: the one as coming from 5ths, and the other as coming from 4ths. The ſum of theſe two powers of r in theſe two connections equal 12, and that of the two powers of s equals 7.

That of the two connections of 5ths or 4ths, in which r is ſmaller, is the diatonic interval; the other is the chromatic. So the interval ſi ut, which has theſe two connections $2^3 : n^5$ and $n^7 : 2^4$. is a diatonic interval, as coming from 4ths, and its connection is $2^3 : n^5$; but this ſame interval ſi ut, is chromatic as coming from 5ths, and its connection is $n^7 : 2^4$, becauſe in the firſt caſe r + 5 is leſs than r = 7 of the ſecond.

On the contrary, the interval fa la, which has its two connections $n^4 : 2^2$ and $2^5 : n^8$ is diatonic in the firſt caſe, where it comes from 5ths, and chromatic in the ſecond, where it comes from 4ths.

The interval ſi ut diatonic, is a ſecond minor: The interval ſi ut, chromatic, or rather the interval ſi ſi dieſis (for then ut is taken as ſi dieſis) is a ſuperfluous uniſon.

The interval fa la diatonic, is a major third: The interval fa la chromatic, or rather the interval mi dieſis la (for then fa is taken as mi dieſis) is a dimiſhed fourth: So with the reſt.

It is evident, I. That to each diatonic interval there correſponds a chromatic of the ſame number of ſemi-tones, and vice verſa.

Theſe

These two intervals of the ſame number of ſemi-tones, the one diatonic and the other chromatic, are called correſpondent intervals.

Secondly. When the power of r is equal to one of theſe numbers 0, 1, 2, 3, 4, 5, 6, the interval is diatonic, whether that this interval comes from 5ths or 4ths; but if the R is equal to one of theſe numbers 7, 8, 9, 10, 11, 12, the interval is chromatic.

Thirdly. When $r = 6$ the interval is in the ſame time diatonic and chromatic, whether it comes from 5ths or 4ths, ſuch are the two intervals fa ſi, called triton, and ſi fa, called falſe fifths.

The triton fa ſi is in the reference $n : 2^{6\ 3}$, and comes from 6 fifths: the falſe 5th ſi fa is in the connection $2^{4\ 6} : n$, and comes from 6 fourths: where we ſee, that in the two caſes we have $r = 6$. So the triton, as a diatonic interval, is a major 4th and as a chromatic interval, as ſuperfluous 4th. The falſe 5th ſi fa, as a diatonic interval, is a minor 5th; as a chromatic interval, a diminiſhed 5th. There are but theſe two intervals and their repliques which are able to be at the ſame time diatonic and chromatic.

The diatonic intervals of the ſame name, and conſequently of the ſame gradation, are divided into major and minor. The chromatic intervals are divided into diminiſhed and ſuperfluous. To each diatonic interval minor, there correſponds a chromatic ſuperfluous interval; and to each diatonic major interval, there correſponds a chromatic diminiſhed interval.

Every interval in aſcending which comes from 5ths is major or diminiſhed, according as that interval is diatonic or chromatic; and reciprocally every major or diminiſhed interval comes from fifths.

Every interval in aſcending which comes from 4ths, is minor or ſuperfluous, according as that interval is diatonic or chromatic, and vice verſa, every minor or ſuperfluous interval comes from fourths.

It would be the contrary if the interval was taken in deſcending.

Of two intervals, correſpondant, that is, the one diatonic and the other chromatic, and which conſequently come, the one from 5ths, and the other from 4ths, the greater is that which comes from 4ths; and it ſurpaſſes that which comes from 5ths in regard to the gradation, by an unity, and, in regard to the intonation, by an interval, whoſe connection is $2^{7\ 12} : n$: that is, 128. 125. This interval is the diminiſhed ſecond called commonly grand comma, or quarter of the tone; and here is a door opened to the enharmonic genus.

To proceed in placing the reader in a right view for the formulæ, peculiar to the improvement of the theory of muſic, I have here given

given the two tables of progreſſion performed by Monſ. de Boiſgelou, by which we ſee with a caſt of the eye the connections of each interval, and the powers of the terms of thoſe connections, according to the number of 4ths or 5ths which compoſe it.

Progreſſion by 5ths beginning by fa.

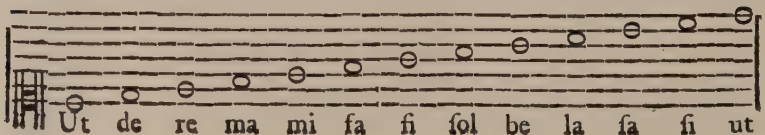
| ut | de | re | ma | mi | fa | fi | ſol | be | la | ſa | ſi | ut |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2 | $2^{5}$ | $2^{2}$ | $2^{6}$ | $2^{3}$ | 1 | $2^{4}$ | 2 | $2^{5}$ | $2^{2}$ | $2^{6}$ | $2^{3}$ | 1 |
| n | 8 n | 3 n | 10 n | 5 n | | 7 n | 2 n | 9 n | 4 n | 11 n | 6 n | 12 |

Progreſſion by 4ths beginning by fi.

| ut | de | re | $m_a$ | mi | fa | fi | ſol | be | la | ſa | ſi | ut |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5 n | 10 n | 3 n | 8 n | n | 6 n | 11 n | 4 n | 9 n | 2 n | 7 | 1 | 5 n |
| 2 | 2 | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | | 2 |
| | 5 | | 4 | | 3 | 6 | 2 | 5 | | 4 | | 3 |

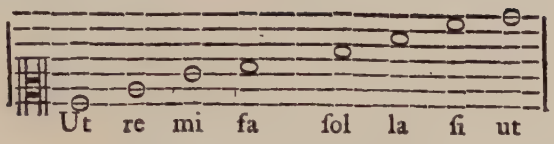
We ſee, in theſe formulæ, that the ſemi-tones are really the primitive and elementary intervals which compoſe all the reſt; which has engaged the author to make for this ſame ſyſtem, a conſiderable change in the characters, by chromatically dividing the ſtave, by intervals, or equal degrees, and all of a ſemi-tone; whereas in the ordinary muſic, each of theſe degrees is ſometimes a comma, ſometimes a ſemi-tone, ſometimes a tone, and ſometimes a tone and a half; which leaves to the eye the equivocation, and to the mind, the doubt of the interval, ſince the degrees being the ſame, the intervals are ſometimes the ſame, and ſometimes different.

For this reformation it is ſufficient to make the ſtave of 10 lines inſtead of 5, and to aſſign to each poſition one of the 12 notes of the chromatic keys before mentioned, according to the order of theſe notes, which always remaining the ſame, determine their intervals with the niceſt preciſion, and render all the dieſis's B's flat, or B's ſharp abſolutely uſeleſs, in whatever tone we may be, and as well in the cleff as accidentally. I have here given the chromatic ſcale without either dieſis or b flat.




and

and alſo the diatonic ſcale.




However little we practice on this new method of pricking and reading the muſic, we ſhall be ſurprized at the neatneſs, and ſimplicity which it gives the notes, and the ſimplicity it conveys in the execution; without its being poſſible to ſee any other inconvenience in it, than that it fills a little more ſpace on the paper, and perhaps may dazzle the eye, in the quicker parts, by the multitude of its lines, and particularly in the ſymphony.

But as this ſyſtem of notes is abſolutely chromatic, it ſeems to me to be inconvenient to ſuffer the denominations of the diatonic degrees to be ſubſtituted in the place of it, and that according to Monſ. Boiſgelou, ut re ought not to be a ſecond, but a third; neither ut mi a third but a fifth; nor ut ut an octave, but a twelfth; ſince each ſemi-tone really forming a degree on the note, ſhould alſo take its denomination; then $x+1$ being always equal to t in the formulæ of that author, theſe formulæ would be found extremely ſimplified. This ſyſtem beſides, appears to me equally profound and advantageous. It would be a deſirable thing for it to be explained, and publiſhed by the author, or ſome ingenious theorician.

SYSTEM. Laſtly is the collection of rules in harmony, drawn from ſome common principles which gather them together, which form their union, from which they flow, and by which we form a computation of them.

Until our age, the harmony, born ſucceſſively, and, as it were by chance, had only ſcattered rules, eſtabliſhed by the ear, confirmed by cuſtom, and which appeared abſolutely arbitrary. Monſ. Rameau is the firſt, who, by the ſyſtem of the fundamental baſs, has given the principles of theſe rules. The ſyſtem on which this dictionary has been compoſed, being ſufficiently explained in the principal articles, ſhall not be treated of in this, which is already too long, and which theſe ſuperfluous repetitions would extend to an exceſs. Beſides, the plan of this work does not oblige me to expoſe all the ſyſtems, but only to give a true explanation what a ſyſtem is, and to ſtrengthen, when neceſſary, that explanation by examples. Thoſe who would wiſh to ſee the diffuſed obſcure ſyſtem of Monſ. Rameau by his writings, lain out with a clearneſs of which it could not have been thought ſuſceptible, may have recourſe to the elements of muſic by Monſ. D' Alembert.

Mon.

Monſ. Serre, of Geneva, having found Monſ. Rameau's Principles inſufficient in many reſpects, planned another ſyſtem on his, in which he pretends to ſhew, that the whole of harmony is borne on a double fundamental baſs: and as this author, having travelled in Italy, was not ignorant of Monſ. Tartini's experiments, he compoſed from them, joining them with thoſe of Rameau, a mixed ſyſtem which was printed at Paris in 1753, under this Title "Eſſay on the Principles of Harmony." The facility that each one has of conſulting this work, and the advantage to be found by reading the whole of it, diſpenſe with my giving any account of it to the public. It is different with that of the illuſtrious Monſ. Tartini, which remains to be ſpoken of; the which as it is written in a foreign language often profound, and always diffuſed, cannot be conſulted but by few people, the greateſt part of which are diſcouraged by the obſcurity of the book, before they have entered upon its beauties. I ſhall, as briefly as poſſible, make an extract of this new ſyſtem, which, if it is not that of nature, is at leaſt, amongſt all that have been yet publiſhed, that, whoſe principle is the moſt ſimple, and from which the whole laws of harmony ſeem to ariſe leaſt arbitrarily.

Syſtem of Monſ. Tartini.

There are three methods of calculating the connections of ſounds.

I. In cutting on the monochord, the entire chord into its parts by moveable bridges, the vibrations or ſounds will be in the inverſe proportion of the lengths of the chord and its parts.

II. In extending equal chords, by unequal weights, the ſound will be as the ſquare roots of the weights.

III. In extending by equal weights, chords, equal in thickneſs and unequal in length, or equal in length and unequal in thickneſs, the ſound will be in the inverſe proportion of the ſquare roots of the dimenſion, wherein the difference is found.

In general, the ſounds are always together in the inverſe proportion of the cubic roots of ſonorous bodies. The ſounds of the chords are moreover changed three ways, viz. in altering either the thickneſs, that is the diameter of the thickneſs, or the length, or tenſion. If all this is equal, the chords are in uniſon. If only one of theſe is changed, the ſounds follow, in inverſe proportion, the connections of the alterations. If two or all the three are changed, the ſounds are, in inverſe proportion, as the roots of the compoſed connections of the alterations. Such are the principles of all the phænomena, which we obſerve in comparing the connections of the ſounds, and thoſe of the dimenſions of the ſonorous bodies.

This

This being underſtood, having placed every thing neceſſary, touch on the organ the key which renders the loweſt note as follows:

All the other notes marked above, will reſound at the ſame time, and ſtill you will hear only the flatteſt ſound.

The ſounds of this ſeries being confounded in the flat ſound, will form in their connections, the natural conſequence of the fractions $\frac{1}{1}\ \frac{1}{2}\ \frac{1}{3}\ \frac{1}{4}\ \frac{1}{5}\ \frac{1}{6}$, which conſequence is an harmonic progreſſion.

This ſame ſeries will be that of equal chords, hung by weight, which would be as the ſquares $\frac{1}{1}\ \frac{1}{4}\ \frac{1}{9}\ \frac{1}{16}\ \frac{1}{25}\ \frac{1}{36}$, &c. of the aboveſaid fractions.

And the ſounds which theſe chords would render, are the ſame, expreſſed in notes in the example.

By this means, all the ſounds which are in harmonic progreſſion after the unity, are reunited to form one only ſenſible to the ear, and the whole harmonic ſyſtem is found in the unity.

There is no ſound, which makes any reſonance but from its aliquots, becauſe in every other fraction, as this would be $\frac{3}{5}$, it is found after the diviſion of the chord in equal parts; a remainder, whoſe vibrations ſtrike againſt each other, ſtops the vibrations of the equal parts, and are equally prevented by them; ſo that of the two ſounds which would reſult from it, the weakeſt is deſtroyed by the ſhock of the reſt.

Moreover, its aliquots being all compriſed in the ſeries of the fractions $\frac{1}{1}\ \frac{1}{2}\ \frac{1}{3}\ \frac{1}{4}$, &c. before given, each of theſe aliquots is what Monſ. Tartini calls unity or harmonic monad, from the concurrence, whence a ſound reſults. So, the whole of harmony being neceſſarily compriſed betwixt the monad or compoſing unity, and the full ſound or compoſed unity, it follow that harmony has,

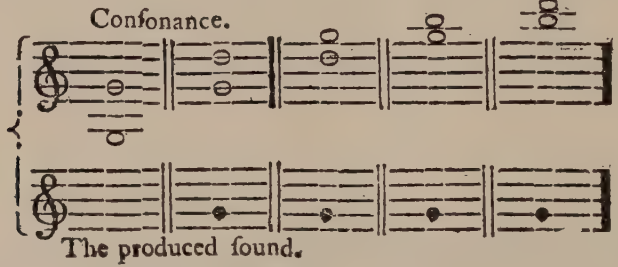
on both ſides, the unity for its term, and conſiſts in that unity eſſentially.

The following experiment, which ſerves as the principle of all artificial harmony, places this truth even in a clearer light.

Every time that two ſtrong times, true and ſuſtained, are heard at the ſame moment, there reſults from their ſhock a third ſound, more or leſs ſenſible, in proportion to the ſimplicity in the connection of the two firſt, and the nicety of the ear in the audience.

To render this experiment as ſenſible as poſſible, we ſhould put two hautboys of a good concord, at ſome paces of interval, and place ourſelves between them, at an equal diſtance from each. If we ſhould be in want of hautboys, we may take two violins, which, tho' the ſound ſhould be weaker, may, by being touched with force and juſtneſs, be ſufficient to make a third ſound be diſtinguiſhed.

The production of this third ſound, by each of our conſonances is as follows:




And we may continue it below the conſonances, by all the intervals repreſented by the aliquots of unity.

The octave gives none, and that is the only interval excepted.

The 5th gives the uniſon of the flat ſound, an uniſon, which, with attention we cannot fail to diſtinguiſh.

The third ſounds produced by the other intervals, are all in flat.

The 4th gives the octave of the ſharp ſound.

The major third gives the octave of the flat ſound, and the minor ſixth, which is varied from it, gives the double octave of the ſharp ſound.

The minor third gives the major tenth of the flat ſound; but the ſixth major, which is varied from it, gives only the major tenth of the ſharp ſound.

The major tone gives the 15th, or double octave of the flat ſound.

The minor tone gives the 17th, or double octave in the major third of the ſharp ſound.

The ſemi tone major gives the 22d, or triple octave of the ſharp ſound.

Laſtly, the ſemi-tone minor, gives the 26th of the flat ſound.

We

We ſee, by comparing the four laſt intervals, that a change hardly perceptible in the interval, changes very ſenſibly the produced or fundamental ſound. So, in the major-tone, confine the interval by lowering the ſuperior ſound, or elevating the inferior only

80

—, immediately the produced ſound will aſcend a tone.

81

Form the ſame operation on the major ſemi-tone, and the produced ſound will deſcend a 5th.

Tho' the production of the third ſound is not confined to theſe intervals, our notes not being able to expreſs any more compoſed, it is uſeleſs for the preſent to go below thoſe.

We ſee in the regular movement of the conſonances which compoſe this table, that they are all connected with one common baſs, and all produce exactly the ſame third ſound.

Here then, by this new phænomenon, is a phyſical demonſtration of the unity in the principle of harmony.

In the Phyſico Mathematic Sciences, ſuch as muſic, the demonſtrations ſhould be very geometrical, but phyſically deduced from the thing demonſtrated. 'Tis then alone that the union of calculation to phyſic, furniſhes, in eſtabliſhed truths, both on experience and geometrically demonſtrated, the true principles of this art. Otherwiſe geometry alone will give certain theorems, but without uſe in practice: Phyſic will give particular facts, but without union together, and any general law.

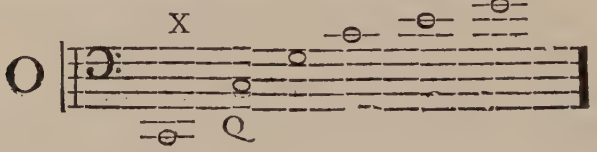
The phyſical principle of harmony is one, as we have ſeen, and is reſolved in an harmonic proportion. Moreover, theſe two proprieties are ſuitable to the circle; for we ſhall ſoon perceive, that the two extreme unities of the monad and ſounds are found therein; and in regard to the harmonic proportion, it is found alſo, ſince in whatever point C, we unequally cut the diameter A B, for which ſee Fig. II. Plate II.

The ſquare of the ordinated C D, will be a proportionate harmonic means between the two rectangles of the parts A C, and C B, of the diameter by the ray; a propriety which is ſufficient to eſtabliſh the harmonic nature of the circle. For, tho' the ordinated parts are geometrical means between the parts of the diameter, the ſquare of theſe ordinated parts being harmonic means between the rectangles, their connections repreſenting ſo much the more exactly thoſe of the ſonorous bodies, than the connections of theſe chords, where the hanging weights are alſo as the ſquares, whilſt the ſounds remain as the roots.

From the diameter A B, divided according to the ſeries of the fractions $\frac{1}{2}\ \frac{1}{3}\ \frac{1}{4}\ \frac{1}{5}\ \frac{1}{6}$, which are in harmonic progreſſion, let

there be drawn the ordinated C, C C; G, G G; c, c c; e, e e; and g, g g; See Fig. III. Plate II.

The diameter repreſents a ſonorous chord, which divided into the ſame computations gives the following ſounds.




To avoid the fractions, let us give 60 parts to the diameter, the ſections will contain theſe entire numbers, B C $= \frac{1}{2} = 30$; B G, $= \frac{1}{3} = 20$; B c $= \frac{1}{4} = 15$; B e $= \frac{1}{5} = 12$; B g $= \frac{1}{6} = 10$.

From the points where the ordinated parts cut the circle, let us draw on each ſide chords to the two extremities of the diameter; the ſum of the ſquare of each chord, and of the ſquare of the correſpondant chord, which I call its complement, will always be equal to the ſquare of the diameter. The ſquares of the chords will be always together as the correſpondent abſciſſes, conſequently alſo in harmonic proportion, and in the ſame manner will repreſent the above example, allowing the exception of the firſt ſound.

The ſquares of the complements of theſe ſame chords will be together as the complements of the abſciſſes in the diameter, conſequently in the following proportions.

$$\overline{\text{A C}}^2 = \frac{1}{2} = 30.$$

$$\overline{\text{A G}}^2 = \frac{2}{3} = 40.$$

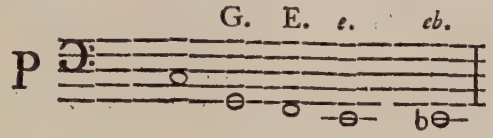
$$\overline{\text{A c}}^2 = \frac{3}{4} = 45$$

$$\overline{\text{A e}}^2 = \frac{4}{5} = 48$$

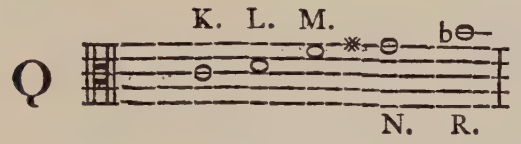
$$\overline{\text{A g}}^2 = \frac{5}{6} = 50.$$

and

and will repreſent the ſounds of the following example,




on which we ought to take notice, in paſſing, that this example, compared to the following,




and to the firſt, gives the natural foundation of the rule of contrary movements.

The ſquares of the ordinated parts will be in the following proportions to the ſquare 3600 of the diameter:

$$\overline{\text{A B}}^{2} = 1 = 3600$$

$$\overline{\text{C, C C}}^{2} = \frac{1}{4} = 900$$

$$\overline{\text{G, G G}}^{2} = \frac{2}{9} = 800$$

$$\overline{\text{c, c c}}^{2} = \frac{3}{16} = 675$$

$$\overline{\text{e, e e}}^{2} = \frac{4}{25} = 576$$

$$\overline{\text{g, g g}}^{2} = \frac{5}{36} = 500$$

and will repreſent the ſounds in the above example.

Moreover, this laſt ſeries which has nothing homologous in the diviſions of the diameter, and without which, we cannot however compleat the harmonic ſyſtem, ſhews the neceſſity of ſeeking in the proprieties of the circle, for the true foundations of the ſyſtem, which cannot be found either in the ſtraight line, or in the abſtracted numbers.

I deſignedly paſs all the other propoſitions of Monſ. Tartini, on the nature of Arithmetic, of the harmony and geometry of the circle, as well as on the bounds of the harmonic ſeries given by the ſextuple computation; becauſe its proofs, expreſſed only in cyphers, eſtabliſh no general demonſtration; and, what is more, by often comparing heterogeneous magnitudes, he finds proportions where we cannot even ſee connections. So, he would prove that the ſquare of a line is a proportional means of ſuch a computation, he makes no other proof, but that ſuch a number is a proportional means between two ſuch other numbers. For the ſurfaces and abſtracted numbers not being of the ſame nature, cannot be compared.

Monſ. Tartini perceives this difficulty, and endeavors to prevent it; we may ſee his reaſonings in his book.

This theory being eſtabliſhed, we muſt now deduce its given proofs and the rules of the harmonic art.

The octave, which engenders no fundamental ſound, not being eſſential to harmony, may be removed from the conſtitutive parts of the concord. So, the concord, reduced to its greateſt ſimplicity, ſhould be conſidered without it. It is then compoſed of theſe three terms, $1 \quad \frac{1}{3} \quad \frac{1}{5}$, which are in harmonic proportion, and where the two monades $\frac{1}{3} \quad \frac{1}{5}$ are the only true elements of ſonorous unity; for the fraction $\frac{1}{4}$ is the element $\frac{1}{2}$, and the fraction $\frac{1}{6}$ is octave of the monade $\frac{1}{3}$.

This perfect concord $\frac{1}{3} \quad \frac{1}{5}$ produced by a ſingle chord, and whoſe terms are in harmonic proportion, is the general law of nature, which ſerves as a baſs to all the ſciences of ſounds; a law, which phyſic may endeavour to explain, but whoſe explanation is uſeleſs to the rules of harmony.

The calculations of the chords, and pendant weights, ſerve to give in numbers the connections of the ſounds which cannot be conſidered as quantities but by favor of theſe calculations.

The third ſound, engendered by the concurrence of two others, is as the product of their quantities; and when in a common cathegory this third ſound is always found the ſame, tho' engendered by different intervals, it is, that the products of the generations are equal together.

This

This is manifeſtly deduced from the precedent propoſitions.

What, for inſtance is the third ſound which reſults from C B and G B? It is the uniſon of C B. Why ſo? Becauſe in the two harmonic proportions, whoſe ſquares of the two ordinated parts C, C C, and G, G G, are proportional means, the ſums of the extremes are equal together, and conſequently produce the ſame common ſound C B or C, C C.

In effect, the ſum of the two rectangles B C, by C, C C, and of A C, by C, C C is equal to the ſum of the two rectangles of B G by C, C C, and of G A by C, C C: for each of theſe two ſums is equal to twice the ſquare of the ray. From whence it follows, that the ſound C, C C, or C B, ſhould be common to the two chords; moreover, this ſound is preciſely the note of the laſt plate.

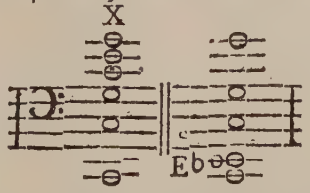
Whatever ordinated parts you may take in the circle, to compare them 2 by 2, or even 3 by 3, they will always engender the ſame third ſound repreſented in the plate; becauſe the rectangles of the two parts of the diameter by the ray, will always give equal ſums.

But the octave X Q engender harmonies only in ſharp, and by no means the fundamental ſound, becauſe we cannot elevate the ordinated part on the extremity of the diameter, and conſequently the diameter and the ray, in their harmonic proportions, have any common product.

Inſtead of harmonically dividing the diameter by the fractions $\frac{1}{2}\ \frac{1}{3}\ \frac{1}{4}\ \frac{1}{5}\ \frac{1}{6}$, which give the natural ſyſtem of the major concord, if we divide it arithmetically into 6 equal parts, we ſhall have the ſyſtem of the major concord varied, and this variation gives exactly the minor concord. See Fig. IV. Plate II.

One of theſe parts will have the 19th, that is, the double octave of the 5th, two will give the 12th, or the octave of the 5th, three will give the octave, four the 5th, and five the minor 3d.

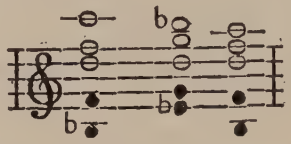
But, as ſoon as uniting two of theſe ſounds, we ſeek the third ſound, which they engender, theſe two ſounds, inſtead of the ſound C,



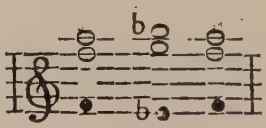

will never produce as fundamental, any but the ſound E b; which proves, that neither the minor concord, or its mode, are given by nature. If we make two or more intervals of the minor concord ſound together, the fundamental ſounds will be multiplied, and in relation

relation to theſe ſounds, we ſhall hear ſeveral major concords, at the ſame time, without any minor concords.

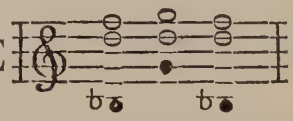
So, by an experiment formed in preſence of eight celebrated profeſſors of muſic, two hautboys and a violin ſounding the white notes together marked as follows:

A 

the ſounds marked in blank in the ſame figure, are diſtinctly heard, viz. Thoſe which are marked aſide as follows, for the intervals which are above,

B 

and thoſe marked next, for the intervals below.

C 

In judging of the horrible cacophony, which ſhould reſult from this concinity, we ſhould conclude that all muſic in the minor mode would be inſupportable to the ear, if the intervals were true enough and the inſtruments ſufficiently ſtrong to render the engendered ſounds as ſenſible as the generators.

I beg leave to remark, *en paſſant*, that the inverſe of two modes marked in a precedent plate, is never bounded to the fundamental concord which conſtitutes them, but that it may be heard throughout the whole air, and harmony; which, noted in a direct ſenſe within the major mode, when we reverſe the paper, and place cleffs at the end of thoſe lines that are become the beginning, preſents another *ſuite* of air and harmony in minor mode, exactly the inverſe of the firſt, wherein the baſs becomes the treble, and vice verſa. This is the cleff of the method of compoſing then double canons which I have ſpoken of at the word canon. Monſ. Serre, before mentioned, who has very clearly explained in his book this harmonic curioſity, introduces a ſymphony of this kind, compoſed by Monſ. de Merambeſt, who ſhould have had it engraved.

That

That would have been certainly better than having it executed. A compoſition of this nature muſt be better to preſent to the eye than the ear.

We have ſeen that from the harmonic diviſion of the diameter, reſults the major mode, and from the arithmetical diviſion, the minor mode. It is beſides a known thing of all the theoricians, that the connections of the minor concord are found in the arithmetical diviſion of the 5th. To find the firſt foundation of the minor mode in the harmonic ſyſtem, it is ſufficient to ſhew in this ſyſtem the arithmetical diviſion of the 5th.

The whole harmonic ſyſtem is founded on a double computation, the connection of the entire chord to its octave, or of the diameter to the ray; and on the ſeſqui alter computation, which gives the firſt harmonic or fundamental ſound, to which all the reſt are connected.

Moreover, if in the double computation, we compare ſucceſſively the ſecond note G, and the third F of the ſeries P to the fundamental ſound Q, and to its flat octave which is the entire chord, we ſhall find that the firſt is an harmonic means, and the ſecond an arithmetical means between thoſe two terms.

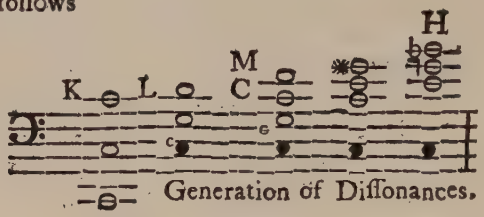
In the ſame manner, if in the ſeſqui alter computation we compare ſucceſſively the 4th note e, and the 5th eb of the ſame ſeries, to the entire chord, and its 5th G, we ſhall find that the 4th e is an harmonic means, and the 5th eb an arithmetical means betwixt the two terms of this 5th. The minor mode then being founded on the arithmetical diviſion of the 5th, and the note eb, taken in the ſeries of the complements in the harmonic ſyſtem, giving this diviſion, the minor mode is founded on that note in the harmonic ſyſtem.

After having found all the conſonances in the harmonic diviſion of the diameter, the major mode in the direct order of theſe conſonances, the minor in their retrograde order, and in their complements, there remains to examine the third example, which expreſſes in notes the connections of the ſquares in the ordinated parts, and which gives the ſyſtem of diſſonances.

If we join, by conſonances, the ſucceſſive intervals of the above example, we ſhall find that to ſquare the ordinated parts, is to double the interval which they repreſent. So, adding a third ſound, which repreſents the ſquare, this added ſound will always double the interval of the conſonance, as we ſee in the following plate.

Thus the firſt note K of the above example doubles the octave, the firſt interval of the other example; the ſecond note L doubles the fifth, the ſecond interval; the third note M doubles the fourth

the third interval, &c. and tis this doubling of intervals which is expreſſed as follows



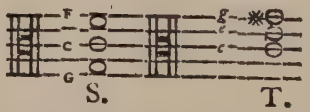

Generation of Diſſonances.

Leaving aſide the octave of the firſt interval, which engendering no fundamental ſound, ought not to paſs as harmonic, the added note L forms, with the two which are below it, a thorough geometrical proportion in ſeſquialter computation, and the following, always doubling the intervals, form alſo always geometrical proportions.

But the proportions and progreſſions harmonic and arithmetical, which conſtitute the conſonant major and minor ſyſtem, are oppoſed, by their nature, to the geometrical progreſſion; ſince this reſults eſſentially from the ſame connections, and the others from connections always different. Then, if the two proportions harmonic and arithmetical are conſonant, the geometrical proportion will be neceſſarily diſſonant; and, conſequently, the ſyſtem which reſults from the former example, will be the ſyſtem of diſſonances.

But this ſyſtem drawn from the ſquares of the ordinated parts is united to the two precedent, drawn from the ſquares of chords. The diſſonant ſyſtem is then united in the ſame manner to the univerſal harmonic ſyſtem.

It follows from thence, firſt, That every concord will be diſſonant, when it contains two ſimilar intervals, others than the octave; whether theſe two intervals be found conjoint with, or ſeparated from the concord. Secondly, that of theſe two intervals, that which belongs to the harmonic or arithmetical ſyſtem ſhall be conſonant, and the other diſſonant. So in the two examples S T of diſſonant concords in the following plate, the intervals G C and c e are conſonant, and the interval's C F and e g diſſonant,



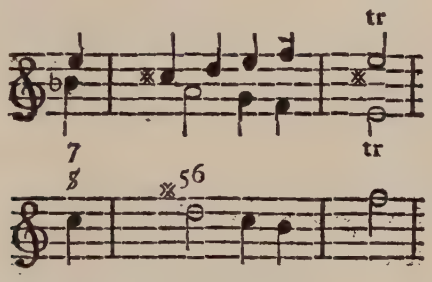

In connecting however each term of the diſſonant ſeries to the fundamental ſound or engendered C of the harmonic ſeries, we ſhall find that the diſſonances which reſult from this connection will be the

the following, and the only direct ones which can be eſtabliſhed on the harmonic ſyſtem.

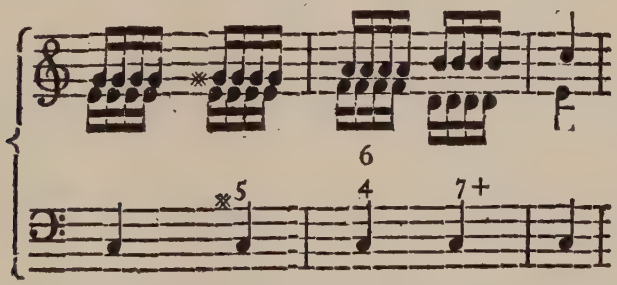
I. The firſt is the 9th, or double 5th L.

II. The ſecond is the 11th, which muſt not be confounded with the ſimple 4th, provided that the firſt 4th, or ſimple 4th G C, being in the particular harmonic ſyſtem, is conſonant; which is not the ſecond fourth, or 11th C M, foreign to this ſame.

III. The third is the 12th or ſuperfluous fifth, which Monſ. Tartini calls the concord of a new invention, either becauſe he firſt diſcovered its principles, or becauſe the ſenſible concord in minor mode on the mediant, which we call ſuperfluous 5th, has never been admitted on account of its horrid roughneſs. Vide the practice of this concord a la Francoiſe,




and the practice of the ſame a l' Italienne.




Before we conclude the enumeration we have begun, I ſhould take notice, that the ſame diſtinction of the two fourths, conſonant and diſſonant, which I have made before, ſhould be underſtood in the ſame manner of the two major thirds of this concord, and the two minor thirds of the following.

IV. The 4th and laſt diſſonance given by the ſeries, the 14th H that is, the octave of the 7th, a 14th which is reduced to the ſimple only by licence, and according to the right which we attri-

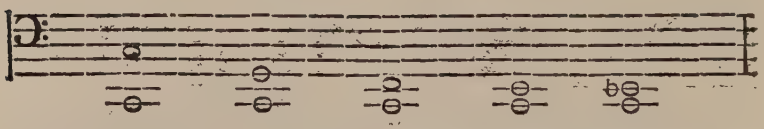
bute to ourſelves in the cuſtom of indifferently confounding the octaves.

If the diſſonant ſyſtem is deduced from the harmonic ſyſtem the rules of preparing and ſaving the diſſonances are not leſs deduced, and we ſee, in the conſonant and harmonic ſeries, the preperations of all the ſounds in the arithmetical ſeries. In effect, comparing the three ſeries O P Q, we always find in the ſucceſſive progreſſion of the ſounds of the ſeries O, not only, as we have ſeen, the ſimple computations, which, when doubled, give the ſounds of the ſeries Q but alſo the ſame intervals, which the ſounds of the two P and Q form together. So that the ſeries O always prepares beforehand, what the two ſeries P and Q immediately produce.

So, the firſt interval of the ſeries O, is that of the chord, a vide, to its octave, and the octave is alſo the interval or concord, which the firſt ſound of the ſeries Q produces, compared to the firſt ſound of the ſeries B.

In the ſame manner, the ſecond interval of the ſeries O (always reckoning from the entire chord) is a 12th; the interval or concord of the ſecond ſound of the ſeries Q compared to the ſecond ſound of the ſeries P, is alſo a 12th.

The third on each ſide, is a double octave, and ſo on.

Moreover, if we compare the ſeries P to the entire chord,

We ſhall find exactly the ſame intervals which the ſeries O gives beforehand, viz. the octave, 5th, 4th, major 3d, and minor 3d.

From whence it follows, that the particular harmonic ſeries gives preciſely, not only the exemplar and model of the two ſeries arithmetical and geometrical, which it engenders, and which with it compleat the univerſal harmonic ſyſtem; but alſo preſcribes to one, the order of the ſounds, and prepares for the other the uſe of the diſſonances.

This preparation, given by the harmonic ſeries, is exactly the ſame which is eſtabliſhed in practice; for the 9th doubled from the 5th, is alſo prepared by a movement of the 5th. The 11th doubled from the 4th, is prepared by a movement of the 4th. The 12th, or ſuperfluous 5th, doubled from the major third, is prepared by a movement of major third; laſtly the 14th, or falſe 5th, doubled from the minor third, is alſo prepared by a movement of the minor third.

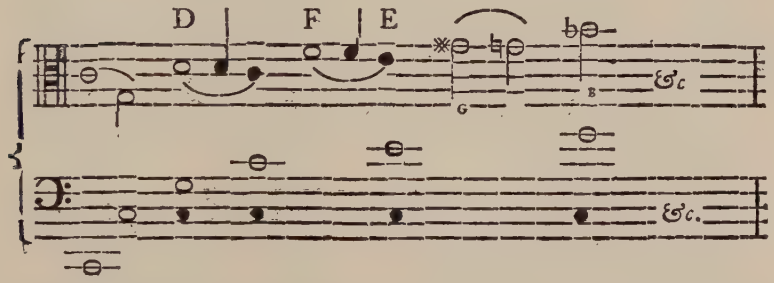
It is true that we muſt not ſeek theſe preparations in the movements called fundamental in Monſ. Rameau's ſyſtem; but which

are

are not ſo in that of Monſ. Tartini; and it is true alſo that the ſame diſſonances are prepared in ſeveral different ways, either by the variations of harmony, or by a ſubſtituted baſs; but the whole depends on the ſame principle, and this is not the place to enter into a detail of rules.

That of reſolving and ſaving the diſſonances ariſes from the ſame principle as their preparation: for as each diſſonance is prepared by the antecedent connection of the harmonic ſyſtem, ſo it is ſaved by the conſequent connection of the ſame ſyſtem.

So, in the harmonic ſeries the connection $\frac{2}{}$, where the progreſs of 5th being that whoſe 9th is prepared and $\frac{3}{}$ doubled, the following connection $\frac{3}{}$ or progreſs of 4th is that whoſe ſame 9th ought to be ſaved. The $\frac{4}{}$ 9th ought then to deſcend a degree, to ſeek in the harmonic ſeries the uniſon of the ſecond progreſs, and conſequently the octave of the fundamental ſound.

General Syſtem of Diſſonances.

By following the ſame method, we ſhall find that the 11th F ſhould in the ſame manner deſcend a degree on the uniſon E of the harmonic ſeries, according to the correſpondant reference $\frac{4}{}$, that the 12th or ſuperfluous 5th G dieſis, ought to redeſcend $\frac{5}{}$ on the ſame G natural, according to the reference $\frac{5}{6}$; and we ſee the reaſon, till now unknown, why the baſs ought to aſcend to prepare the diſſonances, and the treble deſcend to ſave them. We may alſo take notice that the 7th, which, in Monſ. Rameau's ſyſtem is the firſt and almoſt the only diſſonance, is placed the laſt in that of

of Monſ. Tartini; ſo much it was decreed theſe authors ſhould be contradictory in every circumſtance.

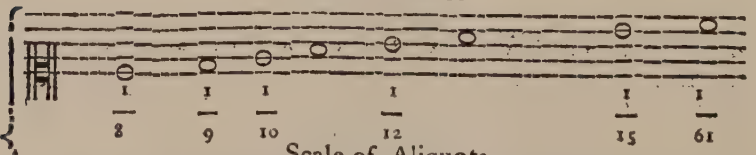
If we have clearly underſtood the generations and analogies of the three orders or ſyſtems, all founded on the firſt, given by nature, and all repreſented by the parts of the circle or their powers, we ſhall find firſt, That the particular harmonic ſyſtem, which gives the major mode, is produced by the ſextuple diviſion in harmonic progreſſion of the diameter, or the entire chord, conſidered as the unity. Secondly, that the arithmetical ſyſtem, from whence the minor mode reſults, is produced by the arithmetical ſeries of the complements; taking the ſmaller term for the unity, and raiſing it from term to term as far as the ſextuple computation, which at laſt gives the diameter, or the entire chord. Thirdly, that the geometrical ſyſtem, or the diſſonant is alſo drawn from the harmonic ſyſtem, by doubling the powers of each interval; from whence it follows, that the harmonic ſyſtem of the major mode, the only one immediately given by nature, ſerves as a principle and foundation to the reſt.

By what has been yet ſaid, we ſee that the harmonic ſyſtem is not compoſed of parts which reunite to form the whole, but on the contrary, it is from the diviſion of the whole, or the integral unity, that the parts are drawn; that the concord forms to itſelf no ſounds, but that it gives them; and that laſtly, whereſoever the harmonic ſyſtem has a place, the harmony does not derive from the melody, but the melody from the harmony.

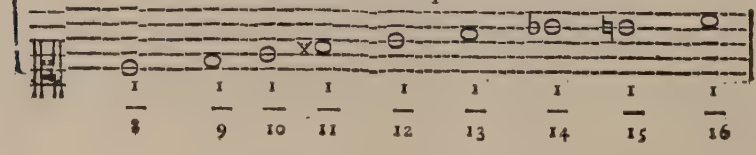
The elements of the diatonic melody are contained in the ſucceſſive degrees of the ſcale or octave of the major mode, beginning by C, from which is derived alſo the ſcale of the minor mode, beginning by A.

This ſcale not being exactly in the order of the aliquots is no more than that which the natural diviſions of horns, trumpets, and other ſimilar inſtruments produce, as may be ſeen in the plate by the compariſon of theſe two ſcales, a compariſon, which ſhews at the ſame time the cauſe of the falſe tones given by theſe inſtruments.

Diatonic Scale.




Scale of Aliquots.



However, the common ſcale, tho' not in concord with the ſeries of the aliquots, has not a leſs phyſical and natural origin to be explained.

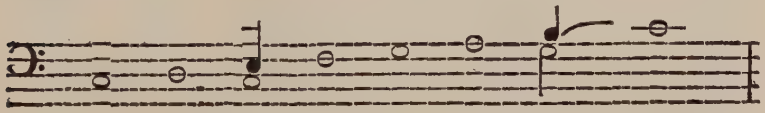
The portion of the firſt ſeries O, which determines the harmonic ſyſtem, is the ſeſquialter or 5th C G; that is, the octave harmonically divided.

Beſides, the two terms, which correſpond to thoſe in the ſeries P of the complements, are the notes G F. Theſe two chords are the middle; the one harmonic the other artificial, betwixt the entire chord and its half, or between the diameter and the ray; and theſe two middle G and F being connected both to the ſame fundamental, determine the tone and even the mode, ſince the harmonic proportion predominates over it; and they appear before the generation of the minor mode, having no other law than that which is determined by the harmonic ſeries, from whence they are derived; they ought each to bear the character, viz. The perfect major concord, compoſed of major 3d and 5th.

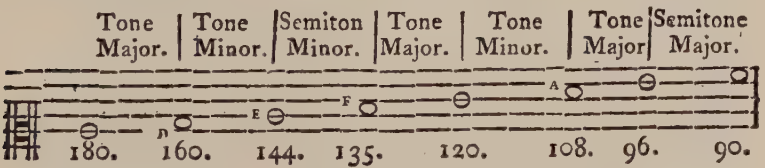
If then we connect and range ſucceſſively, according to the neareſt order, the notes which conſtitute theſe three concords, we ſhall have very exactly, as well in muſical notes, as in numerical connections, the octave or ordinary diatonic ſcale rigorouſly eſtabliſhed.

In notes, the thing is evident by a ſingle operation.

In numerical connections, this is almoſt as eaſily proved, for ſuppoſing 360 for the length of the entire chord, theſe three notes C, G, F, will be as 180, 240, 270; their concords will be as follows:



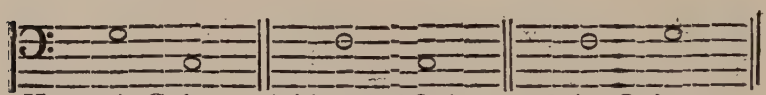
and the entire ſcale ſeduced from it, will be in the connections marked as follows:




Where we ſee that all the intervals are juſt, except the perfect concord, D F A, in which the 5th D A is weak by a comma, as well as the minor third D F, on account of the minor tone D E; but in every ſyſtem this error, or an equivalent one is inevitable.

In

In regard to the other alterations, which the neceſſity of uſing the ſame touches in different tones, introduces into our ſcale), Vide Modification.) The ſcale being once eſtabliſhed, the principal uſe of the notes C G F, from whence it is derived, is the formation of the three cadences, which giving a progreſs of fundamental notes from one to the other, are the baſs of all modulation. G being an harmonic means, and F, an arithmetical means betwixt the two terms of the octave, the paſſage from the middle to the extreme forms a cadance which takes its name from the middle which produces it, G C is then an harmonic cadence; F C an arithmetical; and we call mixt cadence, that which, paſſing from the arithmetical means to the harmonic means, is compoſed of the two before reſolving on the extreme.



Harmonic Cadence. Arithmetical Cadence. Mixt Cadence.

Of theſe three cadences, the harmonic is the principal and the firſt in order: Its effect is of a flat harmony, ſtrong, and terminating in an abſolute ſenſe.

The arithmetical is weak, ſweet, and leaves a ſomething ſtill to be deſired. The mixt cadence ſuſpends the ſenſe, and produces nearly the effect of the interrogative and admirative point.

From the natural ſucceſſion of theſe three cadences, ſuch as we ſee it in a former plate. There reſults exactly the fundamental baſs of the ſcale; and from their different intermixtures is derived the method of treating any tone, and modulating on it a ſeries of airs, for each note of the cadence is ſuppoſed to bear the perfect concord as has been ſaid before.

In regard to what is called "The Rule of the Octave", it is evident, that tho' we ſhould not even admit the harmony which it ſpecifies as pure and regular, as it is found only through dint of art and deductions, it can never be propoſed, in quality of principle and a general law.

The compoſers of the 15th age, the generality of whom were excellent harmoniſts, uſed the whole ſcale as a fundamental baſs of as many perfect concords as it had notes, except the 7th on account of the falſe 5th; and this harmony well conducted, would have formed a very great effect, if the perfect concord on the mediant had not been rendered too harſh by theſe two falſe relations with the concord which precedes it, and that which follows.

To

To render this ſeries of perfect concords as pure and ſweet as poſſible, we muſt reduce it to this other fundamental baſs, which furniſhes with the precedent, a new ſource of varieties.

As we find in this formula, two perfect concords in minor third, viz. D A, it will be neceſſary to ſeek the analogy which the major and minor tones ſhould have together in a regular modulation.

Let us conſider the note eb of the example P, united to the two correſpondent notes of the examples O and Q, taken as fundamental: it is found by this means as the Baſe, or foundation of a concord in major third; but taken as an arithmetical means between the entire chord and its fifth, as in the example X of the other plate: it is then found mediant or ſecond baſe of the minor mode: So this ſame note, conſidered under two different references, and both deducted from the ſyſtem, gives two harmonies; from whence it follows, that the ſcale of the major mode is a minor third above the analogous ſcale of the minor mode.

Wherefore the minor mode analogous to the ſcale of ut, is that of la, and the minor mode analogous to that of fa, is that of re.

Moreover, la and re, give exactly, in the fundamental baſs of the diatonic ſcale, the two minor concords analogous to the two tones of ut and fa, determined by the two harmonic cadences of ut to fa and of ſol to ut. The fundamental baſs, wherein we make theſe two concords enter, is then as regular, and more varied than the precedent, which only contains the harmony of the minor mode.

In regard to the two laſt diſſonances n and r of the example q, as they come from the diatonic genus, we will not yet ſpeak of them.

The origin of the meaſure, the periods, phraſes, and all the muſical rhyme, is found alſo in the generation of the cadences, in their natural ſeries, and their different combinations. Firſt, the means being homogenous to its extreme, the two members of a cadence ought in their firſt ſimplicity, to be of the ſame nature and equal powers. Conſequently the eight notes which form the four cadences, the fundamental baſs of the ſcale, are equal together; and forming alſo four equal meaſures, one for each cadence, the whole gives a compleat ſenſe, and an harmonic period.

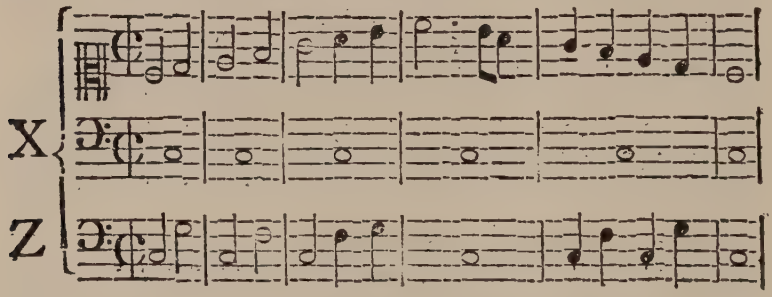
Moreover, as the whole harmonic ſyſtem is founded on the double and ſeſqui alter computation, which on account of the octave is confounded with the triple powers, in the ſame manner every good and ſenſible meaſure is reſolved on that of two times, or that of three, all which is below, often attempted, and always unſucceſsful, not being able to produce any good effect.

From the different foundations of harmony given by the three ſorts of cadence, and from the different methods of intermixing them, ariſes the variety of the ſenſes, of phraſes, and the whole me-

lody; of which the ingenious muſician expreſſes all that of the phraſes for diſcourſe, and punctuates the ſounds as correctly as the Grammarian does the words.

From the meaſure given by the cadences, there reſults alſo the exact expreſſion of the proſody and rhyme; for as the ſhort ſyllable reſts on the long, in the ſame manner the note which prepares the cadence, in riſing, ſuſtains itſelf and pauſes on the note which reſolves it in ſtriking; which divides the times into ſtrong and weak, as the ſyllables into long and ſhort.

This ſhews how we can, even in obſerving the quantities, reverſe the proſody and meaſure the whole *á contre tems*, when we ſtrike the ſhort ſyllables and raiſe the long; tho' we ſhould think we obſerved their relative durations and muſical powers.

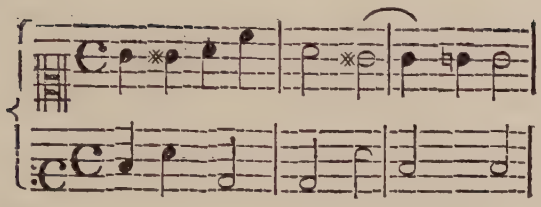
The uſe of diſſonant notes by conjoint degrees in the weak times of the meaſure, is alſo deduced from principles eſtabliſhed thereon; for let us ſuppoſe the diatonic and meaſured ſcale as follows,

It is evident, that the note ſuſtained or ſtruck in the baſs x, inſtead of the notes in the baſs z, is only thus tolerated, becauſe always returning on the ſtrong times, it eaſily eſcapes our attention in the weaker; and the cadences, whoſe place it has, are not leſs ſuppoſed, which could not be, if the diſſonant notes changed place, and were ſtruck on the ſtrong times.

Let us next ſee what ſounds may be added or ſubſtituted to thoſe of the diatonic ſcale, for the formation of the chromatic and enharmonic genera.

By inſerting in their natural order the ſounds given by the ſeries of diſſonances, we ſhall firſt have the note ſol dieſis n, which gives the chromatic genus, and the regular paſſage of the major tone of ut to its minor correſponding la,

Chromatic

Chromatic Tetrachord.



We have next the note r or ſi b flat, which with that I have ſpoken of, gives the enharmonic genus.

Tho' in regard to the diatonic, the whole harmonic ſyſtem is, as has been ſeen, contained in the ſextuple computation, yet the diviſions are not ſo bounded to this extent, but betwixt the 19th or triple fifth $\frac{1}{6}$, and the 22d or quadruple octave $\frac{1}{8}$, we may inſert an hormonic means $\frac{1}{7}$ taken in the order of aliquots, and given alſo by nature in the french-horns and trumpets, and of an intonation very eaſy on the violin.

This term $\frac{1}{7}$, which harmonically divides the interval of the 4th ſol ut or $\frac{6}{8}$, does not form with the ſol a juſt minor third, whoſe reference would be $\frac{5}{6}$, but an interval a little leſs, whoſe whoſe reference is $\frac{6}{7}$, ſo that we cannot exactly expreſs it in notes; for the la dieſis is already too ſtrong: We ſhall repreſent it by the note ſi, preceded by the ſign ⌐ ↄ, a little different from the ordinary b flat.

The ſcale augmented, or as the Greeks ſay, the Epaiſſi Genus of theſe three new ſounds placed in their rank, will be then as the example.

Genus épaiſſi.

The

The whole for the ſame tone, or at leaſt for the tones naturally analogous.

Of theſe three added ſounds, the firſt of which, as Tartini ſhews, conſtitutes the chromatic genus, and the third the enharmonic; the ſol dieſis and the ſi b flat are in the order of diſſonances; but the fi does not fail to be conſonant, tho' it does not belong to the diatonic genus; being out of the ſextuple progreſſion which contains and determines this genus; for ſince it is immediately given by the harmonic ſeries of the aliquots, ſince it is the harmonic medium between the 5th and octave of the fundamental ſound, it follows from thence that it is conſonant as themſelves, and neither wants to be prepared or ſaved: This is alſo what the ear confirms perfectly in the regular uſe of this kind of 7th.

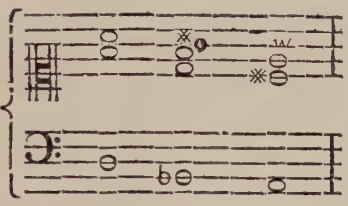
By the affiſtance of this new tone, the baſs of the diatonic ſcale returns exactly on itſelf, in deſcending, according to the nature of the circle which repreſents it; and the 14th or 7th redoubled, is then found regularly ſaved by this note on the tonic or fundamental baſs, as all the other diſſonances.

Would you wiſh to deduce from the principles before placed, the rules of modulation, take the three major relative tones, ut, ſol, fa, and the three minor analogous tones la, mi, re, you will have 6 tonics; and theſe are the only ones on which we can modulate, in going from the principal tone: Modulations which we intermix by choice, according to the character of the air, and the expreſſion of the words; not, however that amongſt theſe modulations there are ſome preferable to others: Theſe preferences even immediately diſcovered by the ſentiment, have alſo their principles and numerical powers, and their exceptions, whether in the different impreſſions which the compoſer would make, or in the greater or leſſer union he gives his phraſes. For inſtance, the moſt natural and moſt agreeable modulation in major mode, is that which paſſes from the tonic ut, to its dominant ſol, becauſe the mode major, being founded on harmonic diviſions, and the dominant harmonically dividing the octave, the paſſage from the firſt term to the middle is the moſt natural. On the contrary, in the minor mode la, founded on the arithmetical proportion, the paſſage from the tone to the 4th note re, which arithmetically divides the octave, is much more natural than the paſſage from the dominant to the tone mi, which harmonically divides the ſame octave, and if we examine attentively, we ſhall find, that the modulations more or leſs agreeable, all depend on the greater or ſmaller references eſtabliſhed in this ſyſtem.

Let us next examine the concords or particular intervals in the minor mode, which are deduced from the ſounds added to the ſcale.

The

The analogy between the two modes gives the three following concords,



all whoſe ſounds have been found conſonant in the eſtabliſhment of the major mode. There is only the added ſound g 𝄪 whoſe conſonance can be diſputed.

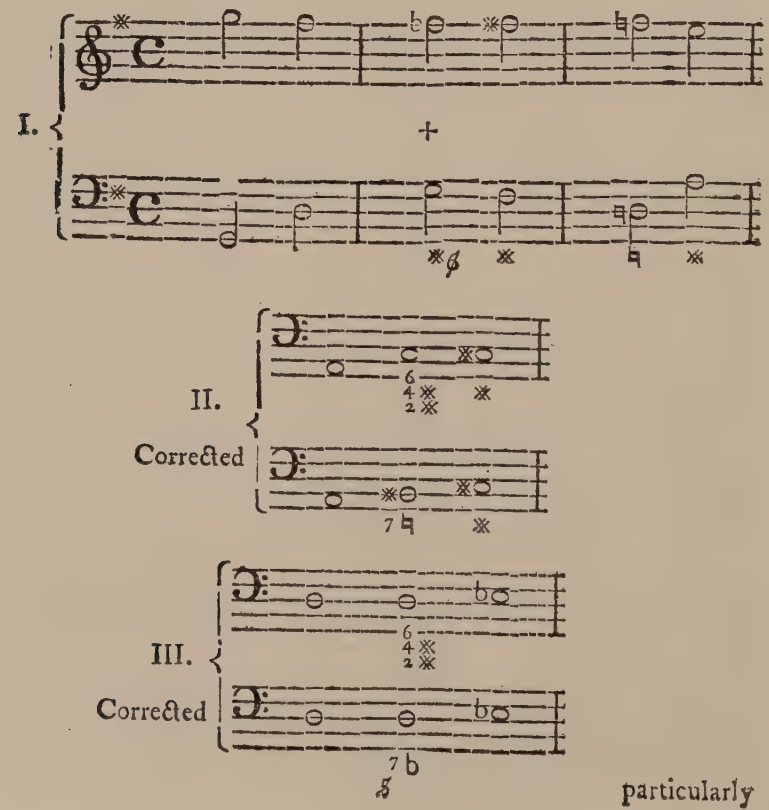
We muſt next take notice, that this concord is not reſolved in the diſſonant concord of diminiſhed 7th, which would have ſol dieſis for baſs, becauſe beſides the diminiſhed 7th ſol dieſis and fa natural, there is alſo found a diminiſhed third ſol dieſis, and ſi b flat, which breaks all proportion, which experience confirms by the unſurmountable roughneſs of this concord. On the contrary, beſides that this arrangement of ſuperfluous 6th pleaſes the ear, and is very harmoniouſly reſolved, Monſ. Tartini pretends that the interval is really good, regular, and even conſonant, Firſt, becauſe this 6th is very nearly an harmonic 4th, to the three notes B b, d, f, repre-

ſented by the fractions $\frac{1}{4} \; \frac{1}{5} \; \frac{1}{0}$, of which $\frac{1}{7}$ is the proportional exact harmonic 4th. Secondly, becauſe that ſame 6th, is very nearly the harmonic means of the 4th fa, ſi b flat, formed by the 5th of the fundamental ſound and its octave. If, on this occaſion, we make uſe of the note marked ſol dieſis, rather than the note marked la b flat, which ſeems to be the true harmonic means, it is not only that this diviſion would remove us very far from the mode, but even that this ſame note la b flat, is only an harmonic means in appearance, provided that, the 4th fa ſi b flat, is changed and too weak by a comma; ſo that ſol dieſis, which has a leſs connection to fa, draws nearer to the true harmonic means than la b flat, which has a greater connection to the ſame fa.

We ought beſides to obſerve that all the ſounds of this concord, which re-unite in a regular harmony, are exactly the four ſame ſounds furniſhed beforehand, in the diſſonant ſeries Q by the complements of the diviſions of the harmonic ſextuple: which, in ſome reſpect, cloſes the harmonic circle, and confirms the union of all the parts in the ſyſtem.

By the aſſiſtance of this 6th, and all the other ſounds, which harmonic and analogous proportion furniſh in the minor mode, we

we have a very eaſy method of prolonging and varying the harmony, without going out of the mode, or even of making uſe of any real diſſonance, as may be ſeen in the example of the counter-point given by Monſ. Tartini, and in which he pretends not to have uſed any diſſonance unleſs the 4th, and final 5th.

This ſame ſuperfluous 6th, has alſo more important and nicer uſes in modulations, turned by enharmonic paſſages, in that it may be indifferently taken in practice for the 7th bemolized by the ſign ♭ from which this dieſis'd 6th differs very little in calculation, and not at all on the keys. In that caſe, this 7th, or that 6th always conſonant, but marked ſometimes by dieſis, and ſometimes by b flat, according to the tone from whence we go out, and that which we enter, produces in harmony apparent and ſudden metamorphoſes, of which, though regular in this ſyſtem, the compoſer would be very much embarraſſed to give a reaſon in any other, as may be ſeen in the following examples,

particularly

particularly in that marked +, when the fa taken as natural, and forming an apparent 7th which cannot be ſaved, is at bottom, no more than a ſuperfluous 6th formed by a mi dieſis, on the ſol of the baſs; which enters into the rigor of the rules. But it is ſuperfluous to extend on the fineſſes of the art, which does not eſcape ingenious harmoniſts, and which others would only abuſe, in uſing them *mal a propos*. It is ſufficient to have ſhewn that the whole is held on ſomething, and that the true ſyſtem of nature leads to the moſt intricate and hidden turnings of the art.

---

# T.

T. This letter is ſometimes written in partitions to deſign the part of the tenor, when this tenor takes the place of the baſs, and is written on the ſame ſtave, the baſs preſerving the pauſe.

Sometimes in the parts of ſymphony, the T ſignifies tutti, and is oppoſed to the letter S, or the word ſolo, which in that caſe muſt have neceſſarily been written before in the ſame part.

TA. One of the four ſyllables with which the Greeks ſol-fa their muſic. (Vide to Sol-fa.)

TABLATURE. This word formerly ſignified the totality of the ſigns in muſic; ſo that, whoever underſtood the notes, and could ſing *á livre ouvert*, was ſaid to be ſkilled in the tablature.

At preſent the word tablature is reſtrained to a certain method of marking by letters, which we uſe for the chord inſtruments touched by the fingers, ſuch as the Lute, the Guittar, and formerly the Theorb, and the Viol.

To mark in tablature, we draw as many parallel lines as the inſtrument has chords. We then write on thoſe lines ſome letters of the alphabet, which expreſſes the different poſitions of the fingers on the chords, from ſemi-tone to ſemi-tone. The letter A denotes the chord a vide, b, expreſſes the firſt poſition, c the ſecond, d the third, &c.

In regard to the powers of the notes, they are marked by ordinary notes of ſimilar powers, all placed on the ſame line, becauſe theſe notes ſerve only to mark the power, and not the degree.

When the powers are always ſimilar, that is, that the method of ſcanning the notes is the ſame in all meaſures, we are ſatisfied with marking it on the firſt, and we proceed.

Herein lies all the myſtery of the tablature which we will aſſiſt towards an explanation by the inſpection of Fig. V. Plate II.

Wherein I have pricked down the firſt couplet of the *Folies d Eſpagne* in tablature for the guittar.

As

As the generality of inſtruments, for which the tablature meaſured, are out of uſe, and as we have found the ordinary notes more convenient for thoſe which are ſtill played, the tablature is almoſt entirely laid aſide or only ſerves for a ſcholar's firſt leſſons.

TACET. A Latin word uſed in muſic to denote the ſilence of a part. When, in the courſe of a piece of muſic, we would mark a ſilence of a certain time, we write it with reſts or pauſes. But when ſome part ought to preſerve a ſilence throughout an entire piece, we expreſs it by the word tacet, written in the part below the name, or firſt notes of the air.

TAIL. We diſtinguiſh in notes the head and the tail. The head is the body of the note itſelf. The tail is that perpendicular ſtroke which is fixed to the head, and which aſcends or falls indifferently acroſs the ſtave. In church muſic, the greateſt part of the notes have no tail, but in our muſic there is only the ſemi-breve without it. Formerly the breve had none alſo; but the different poſitions of the tail ſerved to diſtinguiſh the powers of the other notes and particularly the plica.

At preſent the tail added to the notes of church muſic prolongs their duration; it abridges it, on the contrary, in ours, ſince a minum is equal to only half a ſemi-breve.

TAMBOURIN. A kind of dance very much in faſhion at preſent on the French ſtage. Its air is very lively, and is ſtruck in two quick times. It ought to be well cadenced and bold, in imitation of the flute amongſt thoſe of Provence, and the baſs ought to re-ſtrike the ſame note, in imitation of the Galoubé, with which the player on the flute is generally accompanied.

TASTE. Of all natural gifts, taſte is that which is moſt felt and leaſt explained: It would not be what it is, if it could be defined; for it judges of objects, in which the judgment is not concerned, and ſerves, as it were, as ſpectacles to reaſon.

There are in melody, ſome airs more agreeable than others, tho' equally well modulated. There are, in harmony things ſtriking, and others not ſo, all equally regular. There is in the union of pieces, an exquiſite art of making the one receive a power from the other, which depends on ſomething more nice than the law of contraſts. There are in the execution of the ſame piece, different methods of rendering it, without ever removing it from its character: Of theſe methods, the one pleaſes more than the others, and far from being able to ſubmit them to rules, we cannot even determine them. Reader, give me a cauſe for their differences, and I will explain you what is taſte.

Each man has his peculiar taſte, by the which he gives to things, which he calls beautiful and excellent, an order which belongs to himſelf alone. One is more touch'd with pathetic pieces; the other prefers a gay air. A ſweet and flexible voice

will fill its tunes with agreeable ornaments, a ſenſible and ſtrong voice will animate them with the accents of paſſion. The one will ſeek ſimplicity in melody, the other will aim at laboured ſtrokes, and each will cal that an elegance of taſte, which he has preferred.

This diverſity comes ſometimes from the different diſpoſitions of the organs, from which taſte is extracted; Sometimes from the particular character of each man, which renders him more ſenſible to one pleaſure or failing, than to another; ſometimes from the divinity of age or ſex, which turns the deſires towards the different objects. In all theſe caſes, each having only his own taſte to oppoſe to that of another, it is evident, that there is no diſpute to be made.

But there is alſo a general taſte, on which all organiſed perſons agree, and it is this only, to which we can abſolutely give the name of taſte. Let a concert be heard by ear ſufficiently exerciſed, and men ſufficiently inſtructed; the greateſt number will generally agree on the judgment of the pieces, and on the order of preference convenient to them. Aſk each one the reaſon of his judgment; there are things on which they will give an almoſt unanimous opinion. Theſe are the things which may be ſubmitted to rules, and this common judgment is that of the artiſt and the connoiſſeur. But amongſt theſe things, which they agree to find good or ill, there are ſome on which they cannot authorize their judgment by any reaſon, ſolid and common, to the reſt; and this laſt judgment belongs to a man of taſte. If there is not found a perfect unanimity, it is, that all have not equally good organs; that all are not perſons of taſte; and that the prejudices of cuſtom or education, often change, by arbitrary conventions, the order of natural beauties. In regard to this taſte, we may diſpute on it, by another method of determining the variance, than that of counting the notes, when we do not even agree to that of nature. Here then is what ought to decide, in reſpect to the preference of French and Italian muſic.

Genius creates, but taſte makes the choice; and a too abundant genius is often in want of a ſevere cenſor, to prevent it from abuſing its valuable riches. We can do great things without taſte, but it is that alone which renders them intereſting. It is taſte, which makes the compoſer catch the ideas of the poet: It is taſte, which makes the executant catch the ideas of the compoſer.

It is taſte, which furniſhes to each whatever may adorn and augment their ſubject; and it is taſte which gives the audience the ſentiment of their agreements.

Taſte however is by no means ſenſibility. We may have much taſte, with a frigid ſoul; and a man tranſported with things really paſſionate, is little touched with the pleaſing. It ſeems that taſte

is more particularly connected with the ſmaller expreſſions, and ſenſibility to the greater.

TASTE in SINGING. By this term is called in France, the art of ſinging or playing the notes with the graces ſuitable to them, to cover a little the flatneſs of the French airs. We find at Paris ſeveral inſtructors of this taſte, whoſe principles may be found at the word *graces*.

The taſte in ſinging conſiſts alſo much in artificially giving to a ſinger, the tone, whether good or ill, of ſome actor or actreſs in vogue. Sometimes it conſiſts in ſqueaking thro' the noſe, ſometimes in imitating a duck, a goat, &c. &c, but all theſe, are temporary graces, which change inceſſantly with their authors.

TASTO SOLO. Theſe two Italian words written in a thorough baſs, and generally under ſome organ point, mark that the accompaniſt ought to make no concord with the right hand, but only to ſtrike with the left the marked note, and at moſt, its octave, without adding any thing; provided that it would be almoſt impoſſible for him to follow the turning of the harmony or notes of taſte, which the compoſer makes to paſs on the baſs during that time.

TE. One of the four ſyllables by which the Greeks ſol fa the muſic.

TENDERLY. This adverb written at the head of an air, expreſſes a ſlow and ſweet movement, ſounds drawn pleaſingly and animated both tender and touching. The Italians make uſe of the word amoroſo, to expreſs nearly the ſame thing; but the character of the amoroſo has more accent, and breathes a *je ne ſais quoi* of leſs flat and more paſſionate.

TENEDIUS. A kind of nome for flutes in the ancient Greek muſic.

TENOR. The ſecond of the four parts of muſic, counting from flat to ſharp. It is the part which is moſt convenient to the common voice of a man; which is the cauſe of its often being called thro' preference "The human Voice".

The tenor is ſometimes divided into two other parts; the one more elevated which we call firſt of counter tenor, the other lower, called ſecond or baſs tenor. This laſt is in ſome reſpects a middling or common part, between the tenor and baſs, and is alſo called on that account *Concordant*. (Vide Parts.)

We hardly make uſe of any tenor in the French operas: On the contrary, the Italians prefer in theirs the tenor to the baſs, as a voice more flexible, as ſonorous, and much leſs rough.

TENOUR. A term of church muſic which marks in pſalmody the part which reigns from the end of the intonation as far as the mediation, and from the mediation, as far as the termination.

This

This tenour, which we may call the dominant of the pſalmody, is almoſt always on the ſame tone.

TENTH. An interval, which comprehends nine conjoint degrees, and conſequently 10 diatonic ſounds, in reckoning the two which form it. This is the octave of the third, or the third of the octave, and the 10th is major or minor, as the ſimple interval, whoſe replique it is. (Vide Third.)

TETRACHORD. Was, in ancient muſic, an order or particular ſyſtem of ſounds, whoſe extreme chords ſounded the 4th. This ſyſtem was called tetrachord, becauſe the ſounds which compoſed it, were generally four in number; which however was not always true.

Nichomachus, according to Boetius, ſays, that muſic in its firſt ſimplicity had only four ſounds or chords, whoſe two extremes ſounded the diapaſon together; whereas the two mean diſtances of a tone one from the other, ſounded each the fourth with the extreme, to which it was neareſt, and the fifth with that from which it was moſt diſtant. He calls that the tetrachord of Mercury, from the name of him who was ſaid to be its inventor.

Boetius alſo ſays, that after the addition of three chords made by different authors, Lychaon of Pamos, added an 8th, which he placed betwixt the trite and parameſis, which were formerly the ſame chord; which rendered the octachord complete, and compoſed of two disjoint tetrachords from the conjoint, which they were formerly in the heptachord.

I have conſulted the work of Nicomachus, and it appears to me that there is nothing ſaid to that purpoſe. He ſays on the contrary, that Pythagoras having remarked, that, tho' the mean ſound of the two tetrachords ſounded the conſonance of the 4th with each of the extremes, theſe extremes compared together were entirely diſſonant; he inſerted between the two tetrachords an 8th ſound, which, dividing them by a tone of interval, ſubſtituted the diapaſon or the octave in the place of the 7th between their extremes, and produced alſo a new conſonance between each of the two mean chords and the extreme oppoſed to it.

On the method, by which this addition was made, Nicomachus and Boetius are equally in an error; and not contented with contradicting each other, each of them even contradicts himſelf. (Vide Syſtem, Trite, Parameſis.)

If we paid attention to what Boetius and other more ancient writers ſay, we could give no fixed bounds to the extent of the tetrachord; but whether we divide or flatten the voice, we ſhall find, that the moſt exact definition is that of old Bacchius, and that alſo which I have preferred.

In effect, this interval of 4th is eſſential to the tetrachord; for which reaſon the extreme ſounds, which form this interval are

called immoveable or fixed, by the ancients; whereas they call moveable or changing the middle ſounds, becauſe they may be concordant in ſeveral methods.

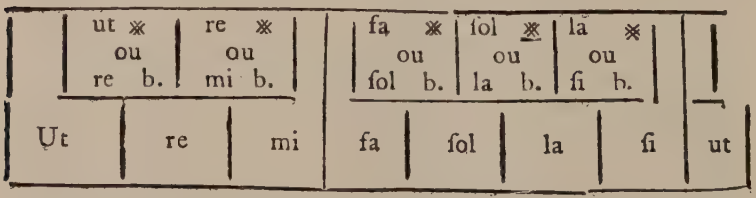
On the contrary, the number of four chords, from whence the tetrachord has taken his name, is ſo little eſſential to it, that we ſee, in ancient muſic, ſome tetrachords which had only three.

Such were, at one time, the enharmonic tetrachords. Such was according to Meibomius, the ſecond tetrachord of the ancient ſyſtem, before a new chord was inſerted. In regard to the firſt tetrachord, it was certainly complete before Pythagoras, as we ſee in the Pythagorean Nicomachus; which does not hinder Monſ. Rameau from affirming, that, according to the unanimous report Pythagoras found the tone, the diton, the ſemi-tone; and that, on the whole, he formed the diatonic tetrachord, (Take notice that that would make a tetrachord), inſtead of ſaying that Pythagoras found only the computations of thoſe intervals, which, according to a more unanimous report, were known a long time before him.

The tetrachords did not long continue bounded to the number of two: there was very ſoon a third formed, then a fourth; a number, to which the ſyſtem of the Greeks continued fixed.

All theſe tetrachords were conjoint; that is, the laſt chord of the firſt, always ſerved as the firſt chord of the ſecond, and ſoon, except a ſingle place in flat, or in ſharp of the third tetrachord, where there was a disjunction, which placed a tone of interval betwixt the higher chord of the inferior tetrachord, and the loweſt of the ſuperior. (Vide Synaphe, Diazeuxis.) Moreover, as this disjunction of the third tetrachord, was ſometimes made with the ſecond, ſometimes with the fourth; this made a particular name peculiar to this third tetrachord, in each of the two caſes.

So that, though there were properly only four tetrachords, there were however five denominations.




Here are the names of theſe tetrachords. The flatteſt of all the four, and which was placed a tone above the chord proſlambanomenos, is called the tetrachord hypaton; The ſecond in aſcending, which was always conjoint with the firſt, was called the tetrachord meſon;

meſon; The third, when it was conjoint to the ſecond, and ſeparated from the fourth, then this third tetrachord took the name of diezeugmenon. Laſtly, the fourth was called the tetrachord hyperbolean. Aretin added to this ſyſtem a 5th tetrachord, which Meibomius pretends that he only re-eſtabliſhed. However it may be, the particular ſyſtems of the tetrachords gave at laſt place to that of the octave, which furniſhed them all,

The two extreme chords of each of theſe tetrachords were called immoveable, becauſe their concord never changed; but each contained alſo two middling chords, which, tho' in true concord in all the tetrachords, were however ſubject, as I have ſaid, to be raiſed or lowered, according to the genus, and even the kind of the genus; which was equally done in all the tetrachords. For this reaſon the chords were called moveable.

There were ſix principal kinds of concord, according to the Ariſtoxenians, viz. Two for the diatonic genus, three for the chromatic, and one only for the enharmonic. Ptolomy reduces theſe ſix kinds to five,

Theſe different kinds, reduced to the moſt common practice, formed only three, one for each genus.

I. The diatonic ordinary concord of the tetrachord formed three intervals, the firſt of which was always of a ſemi-tone, and the two others each of a tone, in this manner: mi, fa, ſol, la.

For the chromatic genus, it was neceſſary to lower the third chord a ſemi-tone, and they had two conſecutive ſemi-tones, then a minor third, mi, fa, fa dieſis, la.

Laſtly, for the enharmonic genus, it was neceſſary to lower the two chords from the middle, till we had two fourths of conſecutive tones, then a major third, mi, mi demi dieſis, fa, la, which formed between the mi dieſis and the fa, a real enharmonic interval.

The ſimilar chords, though they are ſol-fa'd by the ſame ſyllables, did not bear the ſame names in all the tetrachords, but in the flat tetrachords they had denominations different from thoſe which they had in the ſharp tetrachords.

The homologous chords, conſidered as ſuch, bore general names which expreſſed the connection of their poſition in their reſpective tetrachords; wherefore, the name of Barypycni was given to the firſt ſounds of the confined interval, that is, to the flatteſt ſound of each tetrachord; from the meſopycni to the ſeconds or means, from the oxypycni to the third or ſharp, and from the apycni to thoſe, which did not touch the confined intervals on any ſide. (Vide Syſtem.)

This diviſion of the ſyſtem of the Greeks by ſimilar tetrachords, as we divide ours by octaves ſimilarly divided, proves, I think that this ſyſtem had been produced by no ſentiment of harmony, but that they endeavoured to render, by more confined intervals, the

the inflexions of the voice, which their ſonorous and harmonious language gave to their ſuſtained recitation, and particularly to that of their poetry, which was then a veritable muſic; ſo that the muſic was then no more than the accent of the words, and did not become a ſeparated art till after a long track of time. However it may be, it is certain that they confined their primitive diviſions to four chords, all the reſt of which were only repliques, and that they looked on all the other tetrachords, only as ſo many repetitions of the firſt. From whence I conclude, that there is no more analogy between their ſyſtem and ours, than between a tetrachord and an octave, and that the fundamental movement in our mode, which we give as a baſs to their ſyſtem, has no connection with it in any reſpect.

I. Becauſe a tetrachord formed for them as complete a whole, as an octave forms for us.

II. Becauſe they had only four ſyllables to ſol fa, whereas we have ſeven.

III. Becauſe their tetrachords were conjoint, or disjoint at will, which expreſſed their entire reſpective independance.

IV. And laſtly, becauſe the diviſions were exactly ſimilar in each genus, and were practiſed in the ſame mode, which could not be done in our ideas by any truly harmonic modulation.

TETRADIAPASON. Is the Greek name of the quadruple octave, which we alſo called 29th. The Greeks knew no more than the name of this interval, for their ſyſtem of muſic did not reach it. (Vide Syſtem.)

TETRATONON. Is the Greek name of an interval of four tones, called at preſent ſuperfluous 5th. ( Vide Fifth.)

TEXT. Is the poem, where the words are, which are ſet to muſic. But this word is abſolete in this ſenſe, and *text* is no longer uſed amongſt muſicians, but the *words*.

THE. One of the four ſyllables which the Greeks uſed to ſol fa.

THESIS. Lowering, or poſition. By this name was formerly called the ſtrong, or ſtruck time of the meaſure.

THO. One of the four ſyllables which the Greeks uſed to ſol fa.

THIRTEENTH. An interval, which forms the octave of the 6th or the 6th of the octave. This interval is called 13th, becauſe it is formed of 12 diatonic degrees, that is, of 13 ſounds.

TIE. There is a tie in harmony, and a tie in muſic.

The tie has a place in harmony, when this harmony proceeds by ſuch a progreſs of fundamental ſounds, as that ſome one of the ſounds which accompany that we leave, continues and accompanies that which we paſs. There is a tie in the concords of the tonic, and dominant, ſince the ſame ſound forms the 5th of the firſt and the octave of the ſecond; there is a tie in the concords of the tonic

and

and ſub-dominant, provided that the ſame ſound ſerves as 5th to one, and octave to the other. Laſtly, there is a tie in the diſſonant concord every time that the diſſonance is prepared, ſince the preparation itſelf is nothing elſe than the tie.

The tie in the air has place every time that we paſs two or more notes, under a ſingle ſtroke of the bow, or the throat, and is marked by a bent ſtroke, with which the notes are covered, which ought to be united together.

In church muſic we call a tie, a continuance of ſeveral notes paſſed on the ſame ſyllable, becauſe on the paper they are generally tied or united together.

Some name a tie alſo what is properly called ſyncope.

TIED. We call tied notes, two or more notes, which we paſs with a ſingle ſtroke of the bow on the violin, and the violincello; or with a ſingle ſtroke of the tongue on the flute, and the hautboy: In a word, all the notes which are under the ſame tie.

TIERCE. The laſt of the ſimple and direct conſonances in the order of their generation, and the firſt of the two imperfect conſonances.

As the Greeks did not admit it as conſonant, it had no general name amongſt them; but it took only the name of leſs or greater interval, from which it was formed. We call it tierce, becauſe its interval is always compoſed of two degrees, and three diatonic ſounds. To conſider the tierces only in the laſt ſenſe, that is, by their degrees, we find of four ſorts, two conſonant, and two diſſonant. The conſonants are firſt. The major tierce, which the Greeks called diton, compoſed of two tones, as from ut to mi. Its connection is from 4 to 5. Secondly, the minor third called by the Greeks hemiditon, and compoſed of a tone and a half, as mi ſol. Its connection is from 5 to 6.

The diſſonant tierces are firſt. The diminiſhed tierce, compoſed of two major ſemi-tones, as ſi re b flat, whoſe reference is from 125 to 144. Secondly, the ſuperfluous tierce, compoſed of two tones and a half, as fa la dieſis. Its reference is from 96 to 125.

This laſt interval not having place in a ſame mode, is never uſed either in harmony, or in melody. The Italians practice ſometimes the diminiſhed third in the air, but it has no place in any harmony; and this is the reaſon that the concord of ſuperfluous 6th has no variation.

The conſonant tierces are the ſpirit of harmony, particularly the major third, which is ſonorous and brilliant; the minor third is more tender and ſorrowful. It has great ſweetneſs when its interval is redoubled, that is, when it forms the 10th. In general the tierces muſt be carried above; below they are flat and little harmonious,

harmonious, for which reaſon a duet of baſſes has never a good effect.

Our ancient muſicians had almoſt as ſevere laws on the tierces as on the 5ths. It was forbidden to make two together, even of different kinds, particularly by ſimilar movements. At preſent that we have generalized by the good laws of the mode, the peculiar rules of the concord, we form without any error, by ſimilar or contrary movements, by conjoint and disjoint degrees, as many conſecutive major or minor tierces as the modulation can ſuffer, and we have very agreeable duets which from beginning to end, proceed only by tierces.

Tho' the tierce enters into the generality of concords, it does not give its name to any, unleſs to that which ſome call concord of tierce 4th, and which is moſt commonly known by the name of ſmall er 6th. (Vide Concord Sixth.)

TIERCE of PICARDY. The muſicians call by this term, thro' pleaſantry, the major tierce given, inſtead of the minor, to the final of a piece, compoſed in minor mode. As the major perfect concord is more harmonious than the minor, it was formerly a law to finiſh on the firſt; but this final, tho' harmonious, had ſome thing grating which cauſed it to be forſaken. We always finiſh now by the concord which is ſuitable to the mode of the piece, unleſs when we would paſs from minor to major, for then the final of the firſt mode bears the major third elegantly to announce the ſecond.

It was called tierce of Picardy, becauſe the uſe of this final continued longeſt in the church muſic, and conſequently, in Picardy, where they have muſic in a great number of Cathedrals and other Churches.

TIME. The meaſure of a ſound, in regard to its duration.

A ſucceſſion of ſounds, however well it may be directed in its movement, in its degrees from flat to ſharp, or ſharp to flat, produces no more, as it were, than indeterminate effects. It is the relative and proportional durations of theſe ſame ſounds, which fix the true character of muſic, and give it its greateſt energy. The time is the ſpirit of the air: Thoſe airs, whoſe meaſure is ſlow, lead us naturally to ſorrow; but a gay, lively and well cadenced air excites a joy in us, and the feet can hardly be retained from dancing. Remove the meaſure, deſtroy the proportion of the times, the ſame airs which theſe proportions would render agreeable, being left without charms and without force, will become incapable of pleaſing or intereſting. The time on the contrary has its force in itſelf, it depends on that alone, and may ſubſiſt without the diverſity of ſounds. The drum gives us an inſtance of it, always rough and very imperfect, becauſe the ſound of it cannot be ſuſtained.

We

We conſider time in muſic, either with regard to the general movement of an air, and in this ſenſe we ſay that it is ſlow or quick. (Vide Meaſure, Movement,) or, according to the aliquot parts of each meaſure, parts, which are expreſſed by movement of the hand or foot, which are particularly called times; or laſtly, according to the peculiar power of each note. (Vide Power of the Note.)

I have ſufficiently ſpoken, at the word rhyme, of the times in Greek muſic, it remains now to ſpeak of thoſe in modern muſic.

Our ancient muſicians were acquainted with no more than two kinds of meaſure or of time: the one of three times, which they called perfect meaſure; the other of two, treated as an imperfect; and they called time, modes or prolations, the ſigns which they added to the cleff to determine one or the other of theſe meaſures.

Theſe ſigns did not ſerve that ſingle purpoſe as at preſent, but they fixed alſo the relative power of the notes, as we may have already ſeen at the words mode and prolation, in regard to the maximum, the longue and ſemi-breve. In regard to the breve, the method of dividing it, was, what they preciſely called time, and this time was perfect or imperfect.

When the time was perfect, the breve was equal to three ſemi-breves, and they expreſſed that by an entire circle, barred or not barred, and ſometimes alſo by this compoſed cypher $\frac{3}{\cdot}$.

When the time was imperfect, the breve was equal to only two ſemi-breves, and they expreſſed that by a demi-circle or C. Sometimes they turned the C backwards, and this marked a diminution of the half on the powers of each note. We denote the ſame thing at preſent in barring the C. Some have alſo called minor times, that meaſure of the barred C, where the notes continue only the half of their ordinary power; and major time, that of the full C, or of the ordinary meaſure in four times.

We have well retained the triple meaſure of the ancients as well as the double, but by their ſtrange methods of dividing the notes in two methods, we have retained only the ſub-double, tho' we are not leſs in want of the other; ſo that to divide a meaſure or a time into three equal parts, ſigns are wanting to us; and it is with difficulty we know the art of managing them. We muſt have recourſe to the cypher 3, and other expedients, which may ſhew the inſufficiencyof the ſigns.

We have added to ancient muſic, a combination of times, which is the four timed meaſure; but as it may be always reſolved into two 2 timed meaſures, we may ſay that we have abſolutely no more than two times or three times for the aliquot parts of all our different meaſures.

There are as many different powers of times as there are kinds of meaſures and modifications of the movement. But when once the meaſure and movement are determined, all the meaſures ought to be perfectly equal, and all the times of each meaſure perfectly equal together. Moreover, to render this ſenſibility equal, we ſtrike each meaſure, and mark each time by a movement of the hand or foot, and on theſe different movements, we rule exactly the different powers of the notes, according to the character of the meaſure.

It is an aſtoniſhing thing to ſee with what preciſion, we learn the art, by the aſſiſtance of a little cuſtom, of making and following all the times with ſo perfect an equality, that there is no pendulum, which ſurpaſſes the hand or foot of a good muſician in juſtneſs; and that laſtly the ſentiment of this equality alone is ſufficient to guide him, and ſupplies the place of every ſenſible movement; ſo that in each concert the ſame meaſure follows with the greateſt preciſſion, without another taking notice of it, or even himſelf remarking it.

In the different time of a meaſure, there are ſome more ſenſible, more marked than the reſt, tho' of equal powers. The time which marks moſt, is called ſtrong time; that which is marked leſs, is called weak. This is what Monſ. Rameau, in his treatiſe on harmony, called good and ill time. The ſtrong times are, the firſt in the meaſure of two times; the firſt and third in the meaſures of three and four. In regard to the ſecond time it is always weak in all the meaſures, and it is the ſame thing with the fourth in the four timed meaſure.

If we ſub-divide each time, into two other equal parts, which we may call alſo times, or half times, we ſhall have beſides a ſtrong time, for the firſt half, a weak time for the ſecond, and there is no part of a time, which may not be ſub-divided in the ſame manner.

Every note which begins on the weak time, and finiſhes on the ſtrong is a note *á contre tems*, and becauſe it diſguſts and roughens the meaſure in ſome reſpects, it is called ſyncope. (Vide Syncope)

Theſe obſervations are neceſſary to learn a good method of treating the diſſonances. For every diſſonance well prepared ſhould be on the weak time, and ſtruck on the ſtrong; except however in the courſe of avoided cadences, where this rule, tho' applicable to the firſt diſſonance, is not equally ſo to the reſt. (Vide Diſſonance, &c.

TONE. This word has ſeveral ſenſes in muſic.

Firſt. It is taken for an interval, which characteriſes the ſyſtem and the diatonic genus. In this acceptation, there are two ſorts of tones, viz. The major tone, whoſe reference is from 8 to 9, and which reſults from the difference of the 4th to the 5th; and the minor tone, whoſe reference is from 9 to 10, and which reſults from the difference of the minor third to the fourth.

The

The generation of the major tone, and that of the minor are equally found in the ſecond fifth re beginning by ut; for the quantity by which this re ſurpaſſes the octave of the firſt ut, is in the connection from 8 to 9, and that, in which this re is ſurpaſſed by mi, major third of this octave, is in the connection from 9 to 10.

Secondly. We call tone the degree of elevation which the voice takes, or on which the inſtruments aſcend, to execute the muſic.

It is in this ſenſe that we ſay, in a concert, that the tone is too high or too low. In the churches, there is a tone of chorus peculiar to their muſic. There is a chapel tone, and an opera tone for the muſic. This laſt has nothing fixed, but in France it is generally lower than the other.

Thirdly. We give alſo the ſame name to an inſtrument which ſerves to give the tone of the concord to the whole orcheſtra.

This inſtrument which ſome call alſo choriſt, is a whiſtle, which by means of a kind of graduated ſucker, by which we lengthen or ſhorten the pipe at will, gives always nearly the ſame ſound under the ſame diviſion. But that which depends on the variations of the air, nearly prevents us from being aſſured of a fixed ſound, that it ſhould be exactly the ſame. Perhaps, ſince it exiſts from muſic, we have never concerted it twice on the ſame tone. Monſ. Diderot, has given, in his principles of accouſtic, the methods of fixing the tone with much more preciſion, by remedying the variations of the air.

Fourthly, and laſtly. Tone is taken for a rule of modulation relative to a note or principal chord, which is called tonic. (Vide Tonic.)

On the tones of the ancients. (Vide Mode.)

As our modern ſyſtem is compoſed of 12 chords or different ſounds, each of theſe ſounds may ſerve as a foundation to a tone, that is, be its tonic. There are already 12 tones, and as the major and minor modes are applicable to each tone, there are 24 modulations, of which our muſic is ſucceptible on theſe 12 tones. (Vide Modulation.)

Theſe tones differ together by the different degrees of elevation, betwixt the flat and ſharp which the tonics maintain. They differ alſo by the divers alterations of the ſounds and intervals, produced in each tone by the modification, ſo that, on a well tuned harpſichord, a ſkilful ear recollects without trouble whatſoever ſound he hears by the modulation; and theſe tones are equally known on tuned harpſichords higher or lower the one than the other; which ſhews that this knowledge comes at leaſt as much from the different modifications as from the degree of elevation which the tonic maintains on the keys.

From thence ariſes a ſource of varieties and beauties in the modulation, a diverſity and admirable energy in the expreſſion. From thence ariſes laſtly the faculty of exerciſing different ſentiments with ſimilar concords ſtruck in different tones. Are we in want of the majeſtic, the flat? L F ut fa, and the major tones by b flat will expreſs it nobly. Is the gay, the brilliant wanting? Take A mi la, Da la re, the major tones by dieſis. Do we require the affecting, the tender? Take the minor tones by b flat. C ſol ut minor conveys tenderneſs in the ſoul; F ut fa minor reaches the mournful, and expreſſes ſorrow. In a word, each tone, each mode, has its peculiar expreſſion, which we muſt ſtudy, and herein is one of the methods which render an ingenious compoſer maſter, in ſome reſpects, of the affections of thoſe who liſten to him: It is a kind of equivalent to the ancient modes, tho' very much removed from their variety and their energy.

It is, however, of this agreeable and rich diverſity, that Monſ. Rameau would deprive the muſic, by introducing an entire equality and monotony in the harmony of each mode, by its rule of the modification; a rule already ſo often propoſed and abandoned before him. According to this author, it would render the harmony more perfect. It is certain, however, that nothing can be gained in this on one ſide, which is not loſt on the other; and tho' we ſhould ſuppoſe (which is not) that harmony, in general, would be rendered more pure, would that make any amends for what is loſt on the ſide of the expreſſion? (Vide Modification.)

TONE OF THE FOURTH. By this term the organiſts and muſicians of the church have called the plagal of the minor mode, which ſtops and finiſhes on the dominant inſtead of falling on the tonic. This name of the tone of fourth is derived from ſuch, being the modulation of the fourth tone in church muſic.

TONES OF THE CHURCH. Theſe are the methods of modulating the church-muſic on ſuch or ſuch a final, taken in the preſcribed number, by following certain rules admitted in all the churches where the Gregorian chant is practiſed.

We reckon eight regular tones, four of which are authentic or principal, and four plagal or collateral. We call authentic tones thoſe where the tonic occupies nearly the loweſt degree of the muſic; but if the air deſcends three degrees lower than the tonic, in that caſe the tone is plagal.

The four authentic tones have their finals a degree one from the other, according to the order of theſe four notes, re, mi, fa, ſol. So the firſt of theſe tones anſwering to the doric mode of the Greeks, the ſecond anſwers to the phrygian; the third to the æolian, (and not to the lydian, as the ſymphoniſts ſay); and the laſt to the mixo-lydian. It is Saint Miroclet, biſhop of Milan,

lan, or, according to others, Saint Ambroſe, who, about the year 370, choſe theſe four tones to compoſe the chant of the church of Milan; and it was, they ſay, the choice and approbation of theſe two biſhops which occaſioned the name of authentics to be given to theſe four tones.

As the ſounds uſed in theſe four tones, did not take up all the diſdiapaſon, or the 15 chords of the ancient ſyſtem, Saint Gregory formed the project of uſing them all by the addition of four new tones called plagal, which having the ſame diapaſons as the precedent, but their final being raiſed a fourth, anſwers properly to the hyper-dorian, the hyper-phrygian, the hyper-æolian, and the hyper mixo lydian. Others attribute the invention of this laſt to Gui d' Arezzo.

It is from thence that the four authentic tones have each a plagal, as collateral, or ſupplement; ſo that after the firſt tone, which is authentic, comes the ſecond tone, which is its plagal; the third authentic, the fourth plagal, and ſo on. Which cauſes that the modes or authentic tones are alſo called unequal, and the plagal, equal, in regard to their place in the order of ſounds.

The diſcernment of the authentic or the plagal tones is indiſpenſable in him who gives the tone of the chorus; for if the air is in a plagal tone, he muſt take the final nearly in the medium of the voice; and if the tone is authentic, he ſhould take it in the baſs.

Thro' a failure of this obſervation, the voice is often obliged to be forced or not diſtinctly heard.

There are alſo tones called mixed, that is, partaking of the authentic and plagal, or which are in principal and collateral parts; they are alſo called common modes or tones. In this caſe, the numerical name of the denomination of the tone is taken from that of the two which predominates, or which is moſt felt, particularly at the end of a piece.

Sometimes we make tranſpoſitions in a tone to the fifth. So, inſtead of re in the firſt tone, we ſhall have la as final, ſi for mi, ut for fa, and ſo on. But if the order and modulation do not change, neither does the tone, tho' for the convenience of the voice the final may be tranſpoſed. Theſe are obſervations to be made by the ſinger or organiſt who gives the intonation. To appropriate, as much as poſſible, the extent of all theſe tones, to that of a ſingle voice, the organiſts have ſought for the tones of muſic moſt correſpondant to thoſe. Here are thoſe which are eſtabliſhed.

1ſt Tone ——— Re minor
2d Tone ——— Sol minor
3d Tone ——— La minor or Sol
4th Tone ——— { La minor, finiſhing on the dominant

5th

5th Tone——————Ut major or re
6th Tone——————Fa major
7th Tone——————Re major
8th Tone——————Sol major, cauſing the tone to be felt in the tone of ut

We might reduce theſe eight tones even to a ſmaller extent by placing in uniſon the higheſt note of each tone; or, if we chuſe, that which is moſt ſtruck, and which is called, in the terms of church muſic, *dominant*; but as it has not been found that the extent of all theſe tones thus managed exceeds that of the human voice, they have not thought proper to diminiſh this extent by tranſpoſitions more difficult and leſs harmonious than thoſe in uſe.

The tones of the church have ſhewn no ſubmiſſion to the laws of the tones in muſic. They have no intereſt in a mediant, or a ſenſible note, their mode is little determined, and they leave the ſemi-tones, where they are found in the natural of the ſcale; provided only that they neither produce a triton or falſe fifth on the tonic.

TONIC. The name of the principal chord on which the tone is eſtabliſhed. All airs finiſh generally by this note, particularly in the baſs. It is that kind of tierce, which the tonic ſupports, that determines the mode. Wherefore we can compoſe in the two modes on the ſame tonic. Laſtly, the muſicians find this property in the tonic, that the perfect concord rigouroufly belongs to it alone. When we ſtrike this concord on another note, either ſome diſſonance is underſtood, or that note becomes tonic for the moment.

By the method of tranſpoſitions, the tonic bears the name of ut in major mode, and of la in minor. (Vide Tone, Mode, Gamut, to ſol fa, &c.)

Tonic is alſo the name given by Ariſtoxenes, to one of the three kinds of the chromatic genus, whoſe diviſions he explains, and which is the ordinary chromatic of the Greeks, preceeding by two conſecutive ſemi-tones, then a minor third. (Vide Genus.)

Tonic is ſometimes an adjective. We ſay the tonic chord, tonic note, tonic concord, &c.

TRAIN. When two notes are ſeparated by a disjoint interval, and this interval is filled with all its diatonic notes, this is called a train. The train differs from the fuſee, in that the intermediary ſounds which unite the two extremities are very quick, and not ſenſible in the meaſure, whereas thoſe of the train having a ſenſible power, may be ſlow and even unequal.

The ancients called in Greek ἀγωγὴ, and in Latin Ductus, what we at preſent call train, and they diſtinguiſhed three kinds of them

them. Firſt. If the following ſounds followed each other in deſcending, they called that εὐθεῖα, ductus rectus. Secondly. If they followed each other in deſcending, it was ἀνακάμπτουσα, ductus revertens. Thirdly. If after having aſcended by b flat, they redeſcended by b ſharp, or reciprocally, that was called περιφερὴς, ductus circumcurrens. (Vide Cuthia, Anacamptos.)

We ſhould have enough to do at preſent, that the muſic is ſo laboured, if we were to give names to all theſe different paſſages.

TRANSITION. Is, in muſic, a method of ſweetening the mount of a diſjoint interval, by inſerting diatonic ſounds between thoſe which form this interval.

The tranſition is properly a train not marked: Sometimes alſo it is only an extent of the voice, when the queſtion is only to render the paſſage of a diatonic degree more ſweet.

So, to paſs from ut to re, with more ſweetneſs, the tranſition is taken on ut.

Tranſition, in harmony, is a fundamental movement proper to change the genus or the tone in a ſenſible regular manner, and ſometimes by intermediaries. So, in the diatonic genus, when the baſs moves ſo as to require, in the parts, the paſſage of a minor ſemi-tone, it is a chromatic tranſition. (Vide Chromatic.)

If we paſs from one tone to another by favour of a concord of diminiſhed 7th, it is an enharmonic tranſition. (Vide Enharmonic.)

TRANSLATION. Is, in our ancient muſic, the removal of the ſignification of a point, to a note ſeparated by other notes of this ſame point. (Vide Point.)

TO TRANSPOSE. This word has ſeveral ſenſes in muſic.

We tranſpoſe in executing, when we tranſpoſe a piece of muſic in another tone, than that wherein it is written. (Vide Tranſpoſition.)

We tranſpoſe in writing, when we mark a piece of muſic in another tone of muſic than that in which it has been compoſed. Which obliges us not only to change the poſitions of all the notes in the ſame connection, but alſo to number the cleff differently, according to the rules preſcribed at the article cleff tranſpoſed.

We laſtly tranſpoſe in ſol-faing, when without paying attention to the natural name of the notes, we give them thoſe that are relative to the tone, and to the mode in which we ſing.

TRANSPOSITION. A change, by which we tranſport an air or a piece of muſic from one tone to another.

As there only two modes in our muſic, to compoſe in ſuch or ſuch a tone, is nothing elſe than to fix on ſuch or ſuch a tonic

tonic, that of the two modes which we have choſen. But as the order of ſounds is not found naturally diſpoſed on all the tonics, as it ought to be for the eſtabliſhment of a ſame mode, we correct theſe differences by means of the dieſis's or b's flat, with which the cleff is numbered, and which tranſports the two ſemi-tones from the place where they were, to that where they ought to be for the mode and tone in queſtion. (Vide Tranſpoſed Cleff.)

When then we would tranſpoſe in a tone a compoſed air into another, it is firſt neceſſary to raiſe or lower its tonic and all the notes one or more degrees, according to the tone which we have choſen; then to number the cleff as the analogy of this new tone requires. All this is equal for the voice, for in calling ut always the tonic of the major mode, and la, that of the minor, they follow all the affections of the mode, without even paying attention to it. (Vide to Sol-fa.) But it is not a trifling attention for a ſymphoniſt to play in one tone what is marked in another; for, tho' he is guided by the notes which he has before him, his fingers muſt ſound very different ones, and he ſhould alter them quite differently according to the varied method with which the cleff ſhould be numbered for the marked tone, and for the tranſpoſed, ſo that often he ought to form dieſis's where he ſees b's flat, and vice verſa, &c.

It is, I think, a great advantage of the ſyſtem of the author of this Dictionary, to render the pricked muſic equally proper to all the tones, by changing one ſingle letter. This occaſions, that in whatſoever tone we tranſpoſe, the inſtruments which execute have no other difficulty than that of playing the notes, without ever having the embarraſſment of the tranſpoſition. (Vide Notes.)

TREBLE. The ſharpeſt of the parts in muſic, that which reigns above all the reſt. It is in this ſenſe that we ſay of the inſtrumental muſic, a treble of the violin, a treble of the flute and hautboy, and in general a treble of ſymphony.

In vocal muſic, the treble is executed by the voices of women, children, and alſo by caſtrats, whoſe voices, by reports difficult to conceive, gains an octave above, and loſes one below, by means of this mutilation.

The treble is generally divided into firſt and ſecond, and even ſometimes into third.

The vocal part, which executes the ſecond treble, is called baſs treble, and there are alſo made recitatives for the voice only for this part. A beautiful baſs treble full and ſonorous, is not leſs eſteemed in Italy, than the clear and ſharp voices; but they pay no regard to them in France. However, by a caprice of the faſhion, I have ſeen a Mad. Gondre, at the Pariſian Opera very much applauded, who had in effect a very beautiful baſs treble.

TREMBLING

TREMBLING. A grace of ſinging which the Italians call trillo, and which is oftener deſigned in french by the word cadence.

They alſo in former times made uſe of the term of trembling, in Italian tremelo, to adviſe thoſe who played bow inſtruments to ſtrike ſeveral times the note, with the ſame ſtroke of the bow as for the imitation of the trembling on the organ. Neither the name or the thing are uſed at preſent.

HARMONIC TRIAD. This term in muſic has two different ſenſes. In calculation, it is the harmonic proportion; in practice, it is the perfect major concord which reſults from this ſame proportion, and which is compoſed of a fundamental ſound, of its major third and its fifth.

It is called triad, becauſe compoſed of three times.

And harmonic, becauſe it is in harmonic proportion, and is the ſource of all harmony.

TRIHEMITON. Is the name which the Greeks gave to the interval which we call minor third; they called it alſo ſometimes hemiditon. (Vide Hemi, or Semi.)

TRILL. A paſſage in the air of ſeveral notes on the ſame ſyllable.

The trill is only an imitation of the inſtrumental melody, in the occaſions where, whether for the gaiety of the air, or for the truth of the image, or for the force of the expreſſion, it is neceſſary to ſuſpend the diſcourſe and prolong the melody; but we muſt beſides manage that the ſyllable be long, its tone lively, and proper for leaving the throat, the facility of ſounding clearly and lightly the notes of the trill, without tiring the organs of the ſinger, and conſequently, neither thoſe of the audience.

The moſt favourable vowels to extend the voice, are A's, then the full O's and E's; the I and U are little ſonorous, much leſs the diphthongs. In regard to the nazal vowels, they ought never to form a trill. The Italian language abounding in O and A, is much properer for the inflections of the voice than the French, neither are the Italian muſicians ſparing of them. On the contrary, the French, obliged to compoſe almoſt all their ſyllabic muſic on account of the few fabourable vowels, are conſtrained to give the notes a ſlow and plac'd movement, or to make the conſonants diſguſtful, in making the ſyllables concur, which neceſſarily renders the air languiſhing or hard. I do not ſee how the French muſic can ever ſurmount this inconvenience.

It is a popular prejudice to think that a trill is always out of place in a ſad and pathetic air; on the contrary, when the heart is moved in the moſt lively manner, the voice finds the accents more eaſily in words, than the mind can, and from thence comes the uſe of the interjections in all languages. (Vide Neuma.)

It is not a leſs error to think that a trill is always well placed on a ſyllable, or in a word which bears it, without conſidering of the ſituation of the finger, if the ſentiment which he ſhould enter into, be at all ſuitable. The trill is an invention of modern muſic. It does not appear that the ancients made any uſe of it, or even ſtruck more than two notes on the ſame ſyllable. This difference is an effect of that of two pieces of muſic, one of which was ſubmiſſive to the language, whilſt the other gave it the law.

TRIMELES. A kind of nome for the flutes in the ancient muſic of the Greeks.

TRIMERES. A name which was executed in three conſecutive modes, viz. the phrygian, the doric, the lydian. Some attribute the invention of this compoſed nome to Sacadas of Argos, others to Clonos Thegeates.

TRIO. In Italian Perzetto. A muſic with three principal or reciting parts. This kind of compoſition is looked upon as the moſt excellent, and ought alſo to be the moſt regular of all. Beſides the general rules of the counter point, there are more rigorous ones for the trio, whoſe perfect obſervation tends to produce the moſt agreeable to all the harmonies. Theſe rules all flow from this principle, that, the perfect concord being compoſed of three different ſounds, we muſt in each concord, to fill the harmony, diſtribute theſe three ſounds, as much as poſſible, to the three parts of the trio. In regard to the diſſonances, as we ought never to double them, and as their concord is compoſed of more than three ſounds, there is alſo a great neceſſity for diverſifying them, and to make a good choice beſides of the diſſonance of the ſounds alſo, which ought in preference to accompany it. From thence ariſe theſe different rules, of never paſſing a concord without cauſing the third or ſixth to be heard; conſequently of avoiding to ſtrike at the ſame time the 5th and octave, or the 4th and 5th; of not practiſing the octave but with great precaution; and never to ſound two together, even between different parts; to avoid the fourth as much as poſſible, for all the parts of a trio, taken 2 by 2 ought to form perfect duets. From thence, in a word, are all thoſe ſmaller rules of detail, which we practice without even ſtudying them, when we are well acquainted with their principle.

As all theſe rules are incompatable with the unity of melody, and as we never hear a regular and harmonious trio have a determined and ſenſible air in the execution, it follows, that the rigorous trio, is an erroneous genus in muſic. Theſe ſo ſevere rules have been long ſince aboliſhed in Italy, where they never looked on a piece of muſic that does not ſing as good, however harmonious it may be in other reſpects, and whatever trouble its compoſition may have coſt.

We

We ſhould here recollect what I have ſaid at the word duet.

Theſe terms, duet and trio, are only underſtood of the principal and forced parts; and we omit the comprehenſion of accompaniments, &c. ſo that a piece with 4 or 5 parts, cannot ſtill be more than a trio.

The French, who are very fond of the multiplication of parts, provided they find concords more eaſily than airs, not ſatisfied with the difficulties of the ordinary trio, have imagined what they alſo call double trio, whoſe parts are doubled, and all forced. They have a double trio of the Sieur Duché, which paſſes for a maſter piece in harmony.

TRIPLE. A kind of meaſure, in which the meaſures, the times, or the aliquots of thoſe times, are divided into three equal parts.

We may reduce to two general claſſes, this infinite number of triple meaſures, with which Bononcini, Lorenzo, and Broſſard after them, have loaded, the one his Muſico Practico, the other his Alberi Muſicali, and the third his Dictionary. Theſe two claſſes are the meaſure ternary, or of three times, and the binary, whoſe times are divided into ſub-triple powers.

Our ancient muſicians looked upon the three timed meaſure as much ſuperior to the binary, and gave it, on that account the name of perfect mode. We have explained at the words mode, time, prolation, the different ſigns which they made uſe of to expreſs theſe meaſures according to the different powers of the notes, which filled them; but whatever theſe notes were, as ſoon as the meaſure was triple or perfect, there was always a kind of note, which even without point, filled exactly a meaſure, and was ſub-divided into three other equal notes, one for each time. So in the triple perfect, the breve was equal, not to two, but three ſemi-breves, and in the ſame manner with the other kinds of triple meaſures. There was however, a caſe excepted; it was when this breve was immediately preceded or followed by a ſemi-breve, for then the two together forming only a juſt meaſure, whoſe ſemi-breve was equal to a time, there was a neceſſity for the breve to be equal to two only, and ſo with the other meaſures.

By this means were formed the times of the triple meaſure, but in regard to the ſub-diviſions of theſe ſame meaſures; they were always formed according to the ſub-double computation, and I know no ancient muſic, where the times are divided into ſub-triple powers. The moderns alſo have ſeveral three timed meaſures of different powers, the ſimpleſt of which was marked by a 3, and filled with a pointed minum, forming a note for each time. All the reſt are meaſures, called doubles, on account of their ſign being compoſed of two cyphers. (Vide Meaſure.)

The ſecond kind of triple is that which is connected, not to the number of the times in the meaſure, but to the diviſion of each time

time in ſub-triple computation. This meaſure is, as I have juſt ſaid, of modern invention, and is ſubdivided into two kinds, two imed and three timed meaſures, the one of which may be conſidered as doubly triple meaſures, viz. 1ſt. By the three times of the meaſure, and 2dly, by the three equal parts of each time. The triples of that laſt kind are all expreſſed in double meaſures. The triples of this laſt kind are all expreſſed in double meaſures.

Here is a recapitulation of all the triple meaſures uſed at preſent. Thoſe marked with an afteriſk, are no longer uſed.

I. Triples of the firſt kind, that is, whoſe meaſure is three timed, and each time divided into ſub-double computation.

| | | | | | |
|---|---|---|---|---|---|
| | *3 | 3 | 3 | 3 | *3 |
| *3. | 1 | 2 | 4 | 8 | 16. |

II. Triples of the ſecond kind, that is, whoſe meaſure is two timed, and each time, ſub-divided into ſub-triple computation.

| | | | | |
|---|---|---|---|---|
| 6 | 6 | 6 | 12 | *12 |
| 2 | 4 | 8 | 8 | 16 |

Theſe two meaſures are ſtruck at four times.

III. Compoſed triples, that is, whoſe meaſure is three timed, and each time again divided into three equal parts.

| | | |
|---|---|---|
| *9 | 9 | *9 |
| 4 | 8 | 16 |

All theſe triple meaſures are alſo more ſimply divided into three kinds, reckoning as ſuch only thoſe which are ſtruck at three times viz. The triple of minum's, which contains a minum by time, and is thus marked $\frac{3}{2}$.

The triple of notes, which contains a crotchet by time, and is thus marked $\frac{3}{4}$.

[And

And the triple of demi crotchets, which contained a demi crotchet by time, or a pointed crotchet by meaſure, and is thus marked $\frac{3}{8}$.

TRIPLED. A tripled interval is that which is conveyed to the triple octave.

TRIPLUM. Is the name given to the ſharpeſt part in the beginnings of the counter point.

TRITE. Was reckoning from ſharp to flat, as the ancients did the third chord of the tetrachord, that is, the ſecond in reckoning from flat to ſharp. As there were five different tetrachords, there ought to have been as many trites; but this name was not in uſe, but in the three ſharp tetrachords. For the two flat, Vide Parhypate.

Wherefore there were the hyperbolean trite,, the diezeugmenon and ſynnemenon. (Vide Syſtem, Tetrachord.)

Boetius ſays, that the ſyſtem not being yet compoſed of more than two conjoint tetrachords, the name of trite was given to the fifth chord which was alſo called parameſis; that is, to the ſecond chord in aſcending from the tetrachord: But that Lycaon the Samian, having inſerted a new chord between the 6th or paranete and trite, this preſerved the ſingle name of trite, and loſt that of parameſis, which was given to this new chord. This is not entirely what Boetius ſays; but in this manner it muſt be explained to underſtand it.

TRITON. A diſſonant interval compoſed of three tones, two major and a minor, and which may be called ſuperfluous fourth.

This interval is equal on the keys, to that of the falſe fifth; however its numerical powers are not equal, that of the triton being only from 32 to 45; which comes from the triton, being no more than a major tone in the equal intervals on each ſide, inſtead of the two major ſemi-tones in the falſe 5th.

But the moſt conſiderable difference of the falſe 5th, and the triton is that the one is a major diſſonance, which the parts ſave, in being removed; and the other a minor diſſonance, which the parts ſave by drawing near to them.

The concord of the triton is only the over throwing of the ſenſible concord, whoſe diſſonance is conveyed to the baſs. From whence it follows, that this concord ought to be placed only on the fourth note of the tone, which ſhould be accompanied by the ſecond and ſaved by the ſixth.

TO TUNE an Inſtrument.

Is to extend, or to looſen the chords, to lengthen or ſhorten the pipes, to increaſe or diminiſh the maſs of the ſonorous body, until all

all the parts of the inſtrument are in the tone which they ought to have.

To tune an inſtrument, we muſt firſt fix a ſound, which ſerves others as a term of compariſon. This is what we call to take or give the tone. (Vide Tone.) This ſound is generally the ut for the organ and harpſichord; the la for the violin and baſs; which have this la on a chord, a vide, and in a medium proper for being eaſily caught by the ear.

In regard to flutes, hautboys, baſſoons, and other wind inſtruments, they have their tone nearly fixed, which cannot by any means be changed but in changing ſome piece of the inſtrument. We may alſo lengthen them a little at the junction of the pieces, which rather lowers the tone; but there muſt neceſſarily reſult falſe tones from theſe variations, becauſe the juſt proportion is broken between the total length of the inſtrument, and the diſtances from one tone to another.

When the tone is determined, we connect with it all the other ſounds of the inſtrument, which ought to be fixed by the concord according to the intervals ſuitable to them. The organ and the harpſichord accord by 5ths until the partition be made, and by octaves for the remainder of the keys; the baſs and the violin by 5ths. The viol and guittar by 4ths and 3rds, &c. In general we chooſe conſonant and harmonious intervals, that the ear may more eaſily catch their juſtneſs.

This juſtneſs of intervals, cannot be obſerved in practice, in all its rigor, and for them all to accord together, each one in particular muſt undergo ſome alteration. Each kind of inſtrument has particular rules, and a method of according for this purpoſe. We take notice that the inſtruments, from whence we draw the ſounds by breathing, as the flute and hautboy, riſe inſenſibly when we have played ſome time, which happens, according to ſome from the humidity, which proceeding from the mouth with the air, breathes into and ſhortens them; or rather, according to the doctrine of Monſ. Euler, is, that the heat and refraction which the air receives during the inſpiration, renders its vibrations more frequent, diminiſh the weight, and by this means augmenting the relative weight of the atmoſphere, render the ſound rather ſharper.

Whatever the cauſe may be, we muſt in tuning, pay attention to the neareſt effect, and force the word a little when we give or receive the tone on theſe inſtruments; for to remain in tune during the concert, they ſhould be a little too low in beginning.

TUNIST. We call tuniſts of the organ or harpſichord, thoſe who go in churches or houſes, to accommodate and tune the inſtruments, and which in general, are the makers of them.

TUNE. A kind of modification of the human voice, by which we form varied and appreciable ſounds. Let us take notice, that to give

give all the univerſality to this definition which it ought to have, we muſt not only underſtand by appreciable ſounds, thoſe which may be aſſigned by the notes of our muſic, and rendered by the touches of our keys; but all thoſe, by which we may prove or feel the uniſon, and calculate the intervals in any manner ſoever. It is very difficult to determine in what the voice which forms the words, differs from that which forms the tune.

This difference is ſenſible, but we cannot very clearly perceive in what it conſiſts, and when we ſeek to find it, we find it not. Monſ. Dodart has made anatomic obſervations, by favor of which he thinks really to diſcover, in the different ſituations of the larynx, the cauſe of two kinds of voice. But I do not know if theſe obſervations or the conſequences drawn from them, are to be depended on. There ſeems to be wanting to the ſounds which form the diſcourſe, no more than permanence, to form a real tune: It appears alſo, that the different inflexions which we give to the voice in ſpeaking, form intervals which are not at all harmonic, which form no parts of the ſyſtem in our muſic, and which conſequently not being expreſſed in notes, are not properly a tune for us.

The tune does not ſeem natural to mankind. Tho' the ſavages of America ſing, becauſe they ſpeak, yet a true ſavage never ſung. The dumb dont ſing, they form only accents without permanence, a diſguſtful bellowing which their wants draw from them. I ſhould doubt, if the Sieur Pereyre, with all his ingenuity, could ever draw from them any muſical air. Children ſcream, cry, but they dont ſing. The firſt expreſſions of nature have nothing in them melodious or ſonorous, and they teach to ſing, as to ſpeak. The melodious and appreciable tune, is only an artificial imitation of the accents in the ſpeaking or paſſionate voice. We cry, we complain, without ſinging; and as, of all imitations, the moſt intereſting is that of the human paſſions, ſo of all the methods of imitating, the moſt agreeable is the tune.

Tune, applied more particularly to our muſic, in its melodious part, is that which reſults from the duration and ſucceſſion of ſounds, that, from whence the whole of the expreſſion depends, and to which all the reſt are ſubordinate. (Vide Muſic, Melody.) Agreeable tunes ſtrike immediately, they are eaſily engraved in the memory; but they are often the rock of compoſers, becauſe knowledge is only neceſſary for the heaping together of concords, but talents are wanting for a pleaſing air. There are in every nation turns of muſic trivial and worn out, into which muſicians are inceſſantly falling. There are others rough, which are never uſed, becauſe the public always oppoſe them. To invent new tunes, belongs to the man of genius; to find thoſe that are beautiful, belongs to the man of taſte.

Laſtly

Laſtly, in its moſt confined ſenſe, tune is ſaid only of vocal muſic and in that which is mingled with ſymphony; we call the parts in tune thoſe which are deſtined for the voice.

TUTTI. This word is often written in the parts of ſymphony in a concerto, after this other word ſolo, which marks a recitative.

The word tutti expreſſes the place where a recitative finiſhes, and where the whole orcheſtra begins afreſh.

TWELFTH. An interval compoſed of 11 conjoint degrees, that is, of 12 diatonic ſounds, reckoning the two extremes. It is the octave of the 5th.

Every ſonorous chord renders, with the principal ſound, that of the 12th, rather than that of the 5th, becauſe this 12th is produced by an aliquot of the entire chord, which is the third; whereas the two thirds which would give the 5th, are not an aliquot of this ſame chord.

---

# U.

UNCOMPOSED. An uncompoſed interval is that which cannot be reſolved into ſmaller intervals, and has no other element than itſelf, ſuch for inſtance, as the enharmonic dieſis, the comma, and even the ſemi-tone.

Amongſt the Greeks, the uncompoſed intervals were different in the three genera, according to the method of tuning the tetrachords. In the diatonic, the ſemi-tone, and each of the two tones which follow it, were uncompoſed intervals. The minor third, which is found between the 3rd and 4th chord in the chromatic genus, and the major third between the ſame chords in the enharmonic, were alſo uncompoſed intervals. In this ſenſe, there is only a ſingle uncompoſed interval in the modern ſyſtem, viz. The ſemi-tone. (Vide Semi-tone.)

UNISON. An uniſon of two ſounds, which are in the ſame degree, one of which is neither flatter or ſharper than the other, and whoſe interval being null, gives only a reference of equality.

If two chords are of the ſame matter, equal in length, in thickneſs, and equally extended; they will be always in uniſon.

But it is falſe to ſay that two ſounds in uniſon are ſo perfectly confounded, and have ſuch an identity that the ear cannot diſtinguiſh them; for they may differ much in regard to the modification and the degree of force. A bell perhaps may be in uniſon with the chord of a guittar, a viella with the uniſon of a flute, and yet the ſounds are not confounded.

The

The zero is not of the number, nor is the uniſon an interval, but the uniſon is in the ſeries of intervals, what the zero is, in that of numbers; it is the term from whence they go out; it is the point of their beginning.

What conſtitutes the uniſon, is the equality of a number of vibrations made in equal times by two ſounds. As ſoon as there is an inequality betwixt the numbers of theſe vibrations, there is an interval between the ſounds that give them. (Vide Chord, Vibration.)

They tormented themſelves greatly to know if the uniſon was a conſonance: Ariſtotle denies it, Muris affirms it, and P. Merſenne, ranges himſelf in the liſts of the latter. As that depends on the definition of the word conſonance, I do not ſee what diſpute could be occaſioned on it. If we do not underſtand this word conſonance, but as an union of two ſounds agreeable to the ear, the uniſon will be aſſuredly a conſonance; but if we add to it a difference from flat to ſharp, it is clear that it will not be ſo. A more important queſtion, is to know which is moſt agreeable to the ear of the uniſon or a conſonant interval, ſuch, for inſtance, as the octave or 5th. All thoſe who have an ear exerciſed in harmony, prefer the concord of the conſonances to the identity of the uniſon; but all thoſe, who, without the cuſtom of harmony, have no prejudice in regard to the ear, have quite a contrary judgment. The uniſon alone pleaſes them, or at moſt the octave. Every other interval appears to them diſcordant; from whence it would follow, I think, that the moſt natural harmony, and conſequently the beſt, is in uniſon. (Vide Harmony.)

It is a known obſervation of all muſicians, that that of the ſhaking and reſonance of the chord, to the ſound of another chord, aſcends to the uniſon of the firſt, or even to its octave, or the octave of its 5th, &c.

The phænomenon may be explained in this manner.

The ſound of a chord A puts the air in motion. If another chord B is found in the ſphere of the movement of that air, it will act on it. Each chord, in a given time is only ſuſceptible of a certain number of vibrations. If the vibrations, of which the chord B is ſuſceptible, are equal in number to thoſe of the chord A, the airs ſhaken by the one, acting on the other, and finding it diſpoſed to a movement ſimilar to that it has received, communicates it to it.

The two chords moving thus in equal pace, all the impulſions which the air receives from the chord A, and which it communicates to B, are co-incident with the vibrations of that chord, and conſequently will augment its movement, inſtead of acting contrary to it. This movement, thus ſucceſſively augmented, will very ſoon approach to a ſenſible ſhake. The chord B will then render a

ſound for every ſonorous chord which ſhakes, ſounds, and this ſound will neceſſarily be in uniſon with that of the chord of A.

By the ſame reaſon, the ſharp octave will ſhake and reſound alſo, but with leſs ſtrength than in the uniſon; becauſe the co-incidence of the vibrations, and conſequently the impulſion of the air, is leſs frequent by the half. It is even ſtill leſs in the 12th, or re-doubled 5th, and leſs in the 17th of major triple tierce, the laſt of the conſonances which ſhakes and reſounds ſenſibly and directly; for in regard to the minor third and ſixths, they reſound only by combination.

Every time that the numbers of the vibrations of which two chords are ſuſceptible in equal time, are commenſurable, we cannot doubt but that the ſound of the one will communicate to the other ſome ſhake by their common aliquot; but this ſhake being no longer ſenſible below the four preceding concords, it is reckoned as nothing in the remainder. (Vide Conſonance.)

It appears by this explanation, that a ſound never makes another re-ſound but by virtue of ſome uniſon; for any ſound ſpever always gives the uniſon of its aliquots; but as it cannot give the ſound of its multiples, it follows, that a chord ſonorous in its movement, can never make one reſound flatter than itſelf. Whereon we may judge of the truth of the experiment from whence Monſ. Rameau takes the origin of the minor mode.

UNISSONI. This Italian word written at length, or abridged in a partition on the ſtave vide of the ſecond violin, denotes, that it ſhould play in uniſon on the part of the firſt; and this ſame word, written on the ſtave vide of the firſt violin, ſhews, that it ſhould play in uniſon on the part of the air.

UNITY of MELODY. All the fine arts have ſome unity of object, a ſource of the pleaſure which they give to the mind; for the attention divided is by no means at eaſe, and when two objects employ us, it is a proof that neither of them ſatisfies us. There is, in muſic, a ſucceſſive unity which is connected to the ſubject, and by which, all the parts, well united, compoſe a ſingle *totum*, whoſe concinnity and connections we may eaſily perceive.

But there is another unity of object more clear and more preſerved, and from whence there ariſes, without any attention being paid, the energy of muſic, and the force of its expreſſions.

When I hear our Pſalms ſung in four parts, I always begin to be ſeized, raviſhed, with this full and nervous harmony; and the firſt concords, when they are truly toned, incite me even to a ſhivering. But hardly have I heard the continuance of it for ſome minutes, than my attention is relaxed, the noiſe ſtuns me by degrees, ſoon it fatigues me, and in the end I am tired of hearing nothing but concords.

This

This effect does not happen when I hear good modern muſic, though the harmony is leſs vigorous; and I remember, that at the Opera Houſe of Venice, far from a fine air fatiguing me, when well executed, I gave it, however great the length might be, continually a freſh attention, and liſtened to it with more pleaſure at the end than the beginning.

This difference is derived from that of the character of the two modes, one of which is only a continuance of concords, and the other a *ſuite* of the air. The pleaſure, beſides of the harmony is only a pleaſure of a pure ſenſation, and the enjoyment of the ſenſes is always ſhort: Satiety and fatigue are its cloſe attendants. But, the pleaſure of melody and muſic, is a pleaſure of intereſt and ſentiment, which ſpeaks to the heart, and which the artiſt can always ſuſtain and renew by dint of genius.

The muſic ought then neceſſarily to ſing for the touching, the pleaſing, and ſuſtaining the intereſt and attention. But how in our ſyſtems of concords and harmony, can the muſic manage towards the ſinging parts? If each part has its peculiar air, all theſe airs, heard at the ſame time, will be mutually deſtroyed, and will no longer form an air. If all the parts form the ſame air, we ſhall have no more harmony, and the concert will be entirely in uniſon.

The method by which a muſical inſtinct, a certain and dull ſentiment of genius, has removed this difficulty without ſeeing it, and has even drawn an advantage from it, is very remarkable.

The harmony, which ought to ſtifle the melody, animates it, enforces it, determines it. The different parts without being confounded, anſwer the ſame effect; and tho' each of them appears to have its proper air, yet of all theſe re-united parts, we hear only one and the ſame air proceed. This is what I call unity of melody.

Here is the method of the harmony's itſelf concurring to this unity, inſtead of injuring them. They are our modes which characteriſe our muſic, and our modes are founded on our harmony.

Every time then that the harmony ſtrengthens or determines the ſentiment of the mode and modulation, it adds to the expreſſion of the air, provided that it does not cover it.

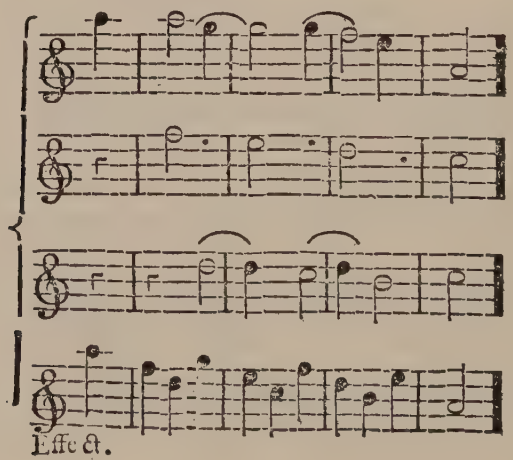
The art of the compoſer, is then in relation to the unity of melody, 1ſt. When the mode is not ſufficiently determined by the muſic, to determine it better by harmony. 2dly. To chooſe and turn its concords, ſo that the moſt lively ſound may be that which ſings, and that which makes it proceed beſt, may be in baſs. 3dly. To add to the energy of each paſſage by rough concords if the expreſſion is rough, and ſweet if the expreſſion is ſweet. 4thly. To pay attention in the turning of the accompaniment to the forte piano of melody. 5thly, and Laſtly, to manage ſo that the air of

of the other parts, far from being contrary to that of the principal part, may ſuſtain it, ſecond it, and give it a livelier accent.

Monſ. Rameau, to prove that the energy of the muſic is all taken from harmony, gives the inſtance of a ſame harmony, which he calls a ſame air, which takes entirely different characters, according to the different methods of accompanying it. Monſ. Rameau has not ſeen that he proved quite the contrary, from what he would prove, for in all the examples he gives, the accompaniments of the baſs ſerves only to determine the air. A ſimple interval is not an air, it becomes air only when it has its place aſſigned in the mode; and the baſs, in determining the mode and the place of the mode, which this interval occupies, determines in that caſe that interval to be of ſuch or ſuch an air; ſo that if by what precedes the interval in the ſame part, we determine the place, which it has in its modulation, I declare, that it will have its effect without any baſs; wherefore harmony acts, in this occaſion, only in determining the melody to be ſuch or ſuch; and it is purely as melody that the interval has different expreſſions according to the place of the mode wherein it is uſed.

The unity of melody requires that we never hear two melodies at a time, but not that the melody ſhould never paſs from one part to another: On the contrary, there is often elegance and taſte to manage á propo's, this paſſage, even from the air to the accompaniment, provided that the words be all underſtood. There is even harmony ingenious, and well managed, wherein the melody, without being in any part, reſults only from the effect of the whole.

We here find an example, which, tho' rough, is ſufficient to make what I have ſaid, clearly underſtood.



A treatiſe would be neceſſary to ſhew in detail the application of this principle in duets, trios, quatuors, in choruſſes, and pieces of ſymphony. Men of genius will ſufficiently diſcover the extent and uſe of it, and their works will inſtruct others. I conclude then, and I ſay, that from the principle which I have juſt eſtabliſhed, it follows, 1ſt. That all muſic which does not ſing, is tireſome, whatever harmony it may have. 2dly. That all muſic, wherein we diſtinguiſh ſeveral airs together, is ill, and that there reſults from it the ſame effect as from two or more diſcourſes pronounced at the ſame time, on the ſame tone. By this judgment, which admits of no exception, we ſee what we ought to think of theſe marvellous pieces of muſic, where one air ſerves as an accompaniment to another. It is in the principle of unity of melody, that the Italians have felt and followed, without knowing it, but which the French have neither known or followed; it is, I ſay, in this grand principle, that the eſſential difference of two pieces of muſic conſiſts; and it is, I believe, what every impartial judge muſt ſay, who would give to each the ſame attention, if the thing might in all reſpects be poſſible.

When I had diſcovered this principle, I wiſhed before I propoſed it, to try at the application of it by myſelf: This eſſay produced *Le Devin de Village*, after the ſucceſs of it, I ſpoke of it in my *Letter on the French Muſic*. It belongs to maſters of the art to judge if the principle is good, and if I have truly followed the rules which iſſue from them.

UNIVOCAL. The univerſal conſonances are the octave and its repliques, becauſe all bear the ſame name. Ptolomy was the firſt which gave them this name.

UPHOLDING or BURDEN. The termination of all the couplets in a ſong, by the ſame words, and by the ſame air, which is ordinarily ſaid twice.

UPINGE. A kind of ſong conſecrated to Diana amongſt the Greeks. (Vide Song.)

UT. The firſt of the ſix ſyllables of the gamut of Aretin, which anſwers to the letter C.

By the method of tranſpoſitions, we always call ut the tonic of the major modes, and the mediant of the minor modes. (Vide Gamut, Tranſpoſition.)

The Italians finding this ſyllable ut too dull, ſubſtitute in its place, in ſol-faing, the ſyllable do.

# V

V. This capital letter ſerves to expreſs the parts of the violin, and when it is a double V, it marks that the firſt and ſecond are in uniſon.

VARIATION. A change of order in the ſounds which compoſe the concords, and in the parts which compoſe the harmony, which is formed in ſubſtituting in the place of the baſs, by octaves, the ſounds which ought to be above; or in that of the extremeties, thoſe which ought to occupy the middle, and reciprocally.

It is certain, that in every concord there is a fundamental and natural order, which is that of the generation of the concord itſelf; but the circumſtances of a ſucceſſion, the taſte, the expreſſion, the beauties of the air, the variety, the attraction of harmony, often oblige the compoſer to change this order in varying the concords, and conſequently the diſpoſition of the parts.

As three things may be ordered in 6 methods, and 4 things in 24 ways, it ſeems at firſt that a perfect concord ſhould be ſuſceptible of 6 variations, and a diſſonant concord of 24; ſince the one is compoſed of 4 ſounds, and the other of 3, and that the variation conſiſts only in the tranſpoſitions of octaves. But we muſt take notice, that in harmony we do not reckon as variations, all the different diſpoſitions of the ſuperior ſounds, whilſt the ſame ſound continues in ſlat. Wherefore theſe two orders of the perfect concord ut mi ſol, and ut ſol mi, are taken only for the ſame name; which reduces all the vibrations of the perfect concord to three; and to four, all thoſe of the diſſonant concord; that is, to as many variations as enter into the different ſounds of the concord: for the repliques of the ſame ſounds are here looked upon as nothing.

Every time then that the fundamental baſs is heard in the flatteſt part, or, if the fundamental baſs is removed every time that the natural order is preſerved in the concord, the harmony is direct.

As ſoon as this order is changed, or the fundamental ſound without being in ſlat, are heard in ſome other part, the harmony is varied. It is a variation of the concord, when the fundamental ſound is tranſpoſed. It is the variation of harmony, when the treble, or ſome other part moves, as the baſs ought to do.

Whereſoever a direct concord is well placed, its variation will be alſo well placed, in regard to harmony, for it is always the ſame fundamental ſucceſſion. So in each note of the fundamental, we are maſters of diſpoſing the concord at will, and conſequently of making every moment a different variation; provided that we make

make no change in a regular and fundamental ſucceſſion; that the diſſonances are always prepared and ſaved by the parts which make them heard; that the ſenſible note always aſcend; and that we avoid the falſe relations too rough in a ſame part. Herein lies the cleff of theſe myſterious differences which the compoſers place between the concords or treble ſyncope, and thoſe wherein the baſs ought to ſyncopate; as, for inſtance, between the 9th and the 2nd. This is, that in the firſt the concord is direct and the diſſonance in the treble; in the others the concord is varied and the diſſonance is in baſs.

In regard to concords by ſuppoſitſon, we want more precautions to vary them. As the ſound, which we add to the baſs, is entirely ſtrange to the harmony, it is often ſuffered only on account of its great diſtance from the other ſound, which renders the diſſonance leſs rough. If this added ſound comes to be tranſpoſed in ſuperior parts, as it is ſometimes, unleſs this tranſpoſition is done with much art, it can produce therein a very bad effect; and this can never be practiſed happily, without cutting off any other ſound of the concord. Vide at the word *concord*, the caſes and choice of theſe cuttings off.

The perfect underſtanding of the variation depends only in ſtudy and art. The choice is another thing. We want an ear and taſte. Experience is neceſſary in different effects; and tho' the choice of the variation is indifferent for the foundation of the harmony, it is not ſo for the effect and expreſſion. It is certain that the fundamental baſs is made to ſuſtain the harmony, and reign below it.

Every time then that we change the order, and vary the harmony, we ought to have good reaſons for it, without which we ſhall fall into the error of our modern muſic, where the treble ſing ſometimes as baſſes, and the baſſes always as trebles; where the whole is confuſed, varied, ill ordered, without any other reaſon than to pervert the order eſtabliſhed, and to ſpoil the harmony.

On the organ and harpſichord the different variations of a concord, as long as they may be done with a ſingle hand, are called ſuperficies.

VARIATIONS. We underſtand under this name, all the methods of ornamenting and doubling an air, whether by diminutions, or by paſſages, or other graces, which adorn and figure this air. To whatever degree we multiply and charge the variations, it is always neceſſary, that acroſs theſe flouriſhes we ſhould have a view to the foundation of the air, which we call ſimple; and the character of each variation muſt at the ſame time be marked by differences which ſuſtain the attention and prevent fatigue.

The

The ſymphoniſts often form variations extempore, or ſuppoſed ſo; but they are more often marked. The different couplets of the Folies d'Eſpagne, are ſo many marked variations. We often alſo find ſome in the French chacons, and in the ſmall Italian airs for the violin and violincello. All Paris have gone to admire, at the ſpiritual concert, the variations of the Sieurs Guignon and Mondonville; and more recently of the Sieurs Guignon and Gaviniés, on the airs of the Pont-neuf, which had no other merit than to be thus varied by the moſt ingenious violin players in France.

VAUDEVILLE. A kind of ſong with couplets, which generally moves on laughable or ſatyrical ſubjects. We make the origin of this little lyric poem aſcend to the reign of Charlemagne; but, according to the moſt common opinion, it was invented by a certain Baſſelin, of Vire in Normandy; and as to dance on theſe airs, they aſſembled in the Val de Vire, they were called they ſay, vaux de vire, and by corruption, vaudevilles.

The air of the vaudevilles is generally little muſical. As we pay attention therein to the words only, the air ſerves only to render the recitative a little more forcible. We perceive beſides in general, neither taſte, or air, or even meaſure. The vaudeville belongs excluſively to the French, and they have ſome very ſtriking and agreeable.

VIBRATION. The ſonorous body in action removes from its ſtate of quick, by gentle ſhakes, but ſenſible, frequent, and ſucceſſive, each of which is called a vibration. Theſe vibrations communicated to the air, bears the ſenſation of the ſound to the ear, by this vehicle; and this ſound is flat or ſharp, according as the vibrations are more or leſs frequent at the ſame time. (Vide Sound.)

VICARIER. A familiar word by which Church Muſicians expreſs what thoſe do, who run from town to town, and from Cathedral to Cathedral, to gather up ſome retributions, and live at the expence of the muſic maſters, who are on their route.

VIDO. Chord a vido, is, on ſleeve inſtruments, ſuch as the viol or violin, the ſound which we draw from the chord in the whole of its length, from the ſounding board as far as the bridge, without placing any finger on it.

The ſound of the chords a vido, is not only flatter, but more reſonant and full than when we place thereon a finger; which is cauſed by the ſoftneſs of the finger, which hurts and intercepts the play of the vibrations. This difference occaſions that good players on the violin avoid touching the chords a vido, to remove that inequality

inequality of the tone which has a bad effect, when it is not managed á propos. This method of executing requires laboured poſitions, which increaſe the difficulties of the play. But ſtill, when we have once acquired a habit, we are really maſters of our inſtrument; and in the moſt difficult tones, the execution then moves as in the eaſieſt.

VILLANELLE. A kind of ruſtic dance, the air of which ſhould be very gay, and of a very ſenſible meaſure. The foundation of this air is generally a couplet rather ſimple, on which we form doubles and variations.

VIOL. By this name, in the Italian muſic, is called that part which the French ſtile tenor; for the French often double this part, that is, make two for one: a thing which the Italians never do. The viol ſerves to unite the treble to the baſs, and to fill, in an harmonious manner, the too great vido which muſt remain between them. For which reaſon, the viol is always neceſſary for the concordance of the whole, even when it only makes the baſs play on the octave, as it often happens in Italian muſic.

VIOLIN. The thing for the perſon. A ſymphoniſt who plays on the violin in an orcheſtra. The violins are generally divided into firſt, which play the firſt treble; and ſecond, which play the ſecond. Each of theſe two parts has its chief, or guide, which is alſo called the firſt; viz. The firſt of the firſt; the firſt of the ſeconds. The firſt of the firſt violins is alſo called in brief, firſt violin; it is the chief of the whole orcheſtra; it is that which gives the tone, guides all the ſymphonies, which rectifies them when in an error, and on which they muſt all depend.

VIRGULUM. By this term the muſicians called that part of the note which has been ſince called tail.

VOCAL. What belongs to the tone of voices. "A vocal turn in ſinging." "Vocal muſic."

THE VOCAL. We ſometimes take this adjective ſubſtantively, to expreſs that part of the muſic which is executed by voices. "The ſymphonies of ſuch an opera are tolerably good; but the vocal is ſhocking."

VOICE. The ſum of all the ſounds which a man can, in ſpeaking or ſinging, crying, &c. draw from his organs, forms what is called the voice; and the qualities of this voice depend alſo from thoſe of the ſounds which form them. So we may apply to the voice, all that I have already ſaid of ſound in general. (Vide Sound.)

I. The phyſicians diſtinguiſh the voice as a ſimple ſound, ſuch as the cry of children.

II. As an articulated ſound, ſuch as in diſcourſe.

III. In muſic, which adds to the modulation and variety of the tones.

IV. In declamation, which ſeems to depend on a new modification in the voice, and even on the ſubſtance itſelf: a modification different from that of the muſic, and that of the words, ſince it may be united to each, or be cut off from it.

We may ſee, in the Encyclopædia, at the article "Declamation des *Anciens*," from whence theſe diviſions are drawn, the explanation which Monſ. Duclos gives of theſe different kinds of voices. I ſhall content myſelf with tranſcribing here what he ſays of the ſinging or muſical voice, the only one which is connected with my ſubject. "The ancient muſicians eſtabliſhed, "after Ariſtoxenes, 1ſt. That the voice of muſic ſhould paſs from "one degree of elevation or lowering, to another; that is, from "one tone to another, by a leap, without paſſing through the "interval which ſeparates them; whereas that of the diſcourſe "is raiſed and lowered by a continued movement. Secondly, "That the ſinging voice ſhould be ſuſtained on the ſame tone, "conſidered as an indiviſible point, which does not happen in "ſimple pronunciation.

"This movement by leaps and ſtops, is, in effect, that of the "voice in ſinging: but is there nothing more in muſic?

"There has been a tragic declamation which admitted the "paſſage from one tone to another by a leap, and the ſtop on a "tone. We take notice of the ſame thing in certain orators. This "declamation, however, is different from the voice in ſinging.

"Monſ. Dodart, who joined to the ſpirit of labour and diſcuſ-"ſion, the greateſt knowledge of phyſic, of anatomy, and the "play of the parts in the human body, has particularly given "an attention to the organs of the voice. He obſerves, firſt, "that ſuch a man, whoſe voice in diſcourſe is diſpleaſing, may "ſing very agreeably. And ſo, on the contrary, ſecondly, That "if we have not heard a perſon ſing, whatſoever knowledge we "may have of his ſpeaking voice, we can form no true idea of "his voice in ſinging.

"Monſ. Dodart, continuing his reſearches, diſcovered, that in "the ſinging voice, there is, beſides that of the words, a move-"ment of the whole larynx; that is, from the part of the tra-"chean artery, which forms as a new canal, terminated in the "glotta, which ſuſtains and ſurrounds its muſcles. The differ-"ence between the two voices comes then from that which is "between the larynx, ſeated and in peace on thoſe which are "attached to it in words; and this ſame larynx ſuſpended on "its attached parts in action, and moved by a balance from high "to low, and from low to high. This balance may be com-"pared to the movement of the birds which hover in the air, "or of the fiſh which are continued in the ſame place againſt "the courſe of the tide; though the wings of the one, and the

"fins

" fins of the other, appear immoveable to the eye, they form " continual vibrations; but ſo ſhort and quick, that they are " imperceptible.

" The balance of the larynx produces, in the ſinging voice, a " kind of ondulation, which is not in ſimple diſcourſe. The " ſuſtained and modulated ondulation, in fine voices, is too much " felt in the weak and decayed. This ondulation ought not to " be confounded with the cadences and trills which are formed " by the very quick and very delicate movements of the opening of " the throat, and which are compoſed of the interval of a tone, " or demi-tone.

" The voice, whether for muſic or diſcourſe, comes entirely " from the throat, in regard to the ſound and the tone; but the " ondulation comes entirely from the balance of the whole la- " rynx: It does not form a part of the voice, but it affects its " totality. It reſults from what I have lain down, that the " voice in muſic conſiſts in the movement, by a leap from one " tone to another, in the continuance of the tones, and in that " ondulation of the larynx which affects the totality, and even " ſubſtance of the ſound."

For, firſt we may, at will, give or remove from the voice that ondulation when we ſing; and we do not leſs ſing when we clip an united ſound without any kind of ondulation. Secondly, the ſounds of the inſtruments do not differ in any kind from thoſe of the ſinging voice, in regard to their nature of muſical ſounds, and have nothing by themſelves by this ondulation. Thirdly, This ondulation is formed in the tone, and not in the modification: The proof of it is, that on the violin and other inſtruments, we imitate this ondulation, not by any balance ſimilar to the ſuppoſed movement of the larynx, but by a balance of the finger on the chord, which, thus ſhortened and lengthened alternatively, and almoſt imperceptibly, renders two alternative ſounds, in proportion as the finger draws back, or advances. So the ondulation, whatever Monſ. Dodart ſays, does not conſiſt in a very light balance of the ſame ſound; but in the more or leſs frequent alteration of two very neighbouring ſounds; and when the ſounds are too diſtant, and the alternative ſuccours are too rough, in that caſe the ondulation roughens.

I ſhould think, that the true diſtinctive character of the voice in muſic, is to form appreciable ſounds, by which the uniſon may be taken or felt, and paſſed from one to the other by harmonic and commenſurable intervals; whereas, in the ſpeaking voice, either the ſounds are not ſufficiently ſuſtained, and, as it were, not in proper union to be appreciated, or the intervals which ſeparate them are not ſufficiently harmonic, or their connections ſufficiently ſimple.

The obſervations which Monſ. Dodart makes on the difference of the ſpeaking voice, and that of ſinging, in the ſame man, far from being contrary to this explanation, confirm it; for as there are languages more or leſs harmonious, whoſe accents are more or leſs muſical, we take notice alſo, in theſe languages, that the ſpeaking and ſinging voices are connected or removed in the ſame proportion. So, as the Italian language is more muſical than the French, the words are leſs diſtant from it in the muſic; and it is more eaſy to have the knowledge of a man we have heard ſpeak, by his ſinging in that language. In a language which would be completely harmonious, as was the Greek at the beginning, the difference of the ſpeaking and ſinging voices is null: We ſhould have the ſame voice for ſpeaking and ſinging. Perhaps that may be at preſent the caſe of the Chineſe.

Here may perhaps be too much on the different genera of the voice: I now return to the ſinging voice, and ſhall confine myſelf to it during the remainder of this article.

Each individual has his particular voice, which diſtinguiſhes him from every other voice by ſome peculiar difference, as one face is diſtinguiſhed from another; but there are alſo ſome of theſe differences, which are common to ſeveral, and which forming ſo many kinds of voices, require a particular denomination of each.

The moſt general character which diſtinguiſhes the voices, is not that which is drawn from their tone or volume; but from the degrees which this volume occupies in the general ſyſtem of ſounds.

We diſtinguiſh in general, the voices into two claſſes, viz. the ſharp and flat voice. The known difference between each, is nearly an octave; which cauſes that the ſharp voice really ſings in the octave of the flat, when they ſeem to ſing in uniſon.

The flat voices are the moſt general for men, the ſharp for women; Eunuchs and children have nearly the ſame diapaſon of voice as women. All men however may even approach it in ſinging the faucet. But of all the ſharp voices, we muſt agree, in ſpite of the prevention of the Italians for caſtrati, that there is no kind of voice comparable to that of women, either for the extent, or the beauty of the tone. The voice of children has little conſiſtence, and no baſs. That of eunuchs on the contrary, excells in alto; and as to the faucet, it is the moſt diſagreeable of all the tones in the human voice. It is ſufficient to be of that ſentiment, to be attentive to the choruſſes of the ſpiritual concert at Paris, and to compare their trebles with thoſe at the opera.

All theſe different diapaſons, reunited and put in order, form a general extent nearly of three octaves, which have been divided into four parts, three of which, called counter tenor, tenor and baſs, belong to the flat voice; and the fourth only called treble, is

aſſigned

aſſigned to ſharp voices. On which ſubject, here are ſome remarks which I preſent to the reader.

I. According to the ſtave of the ordinary voices, which may be fixed nearly to a major 10th, by placing two degrees of interval between each kind of voice, and that which follows it, which is all the difference that can be given them, the general ſyſtem of the human voice in the two ſexes, which we make to paſs three octaves, ought to contain only two octaves and two tones. It was in effect to this extent, that the four parts of muſic were bounded, long after the invention of the counter point, as we ſee in the compoſitions of the 14th age; where the ſame cleff, on four ſucceſſive poſitions from line to line ſerves as the baſs, which they called tenor; for the tenor, which they called contratenor; for the counter, tenor, which they called mottetu; and for the treble, which they called triplum. This diſtribution muſt really render the compoſition more difficult, but at the ſame time the harmony more confined and more agreeable.

II. To advance the vocal ſyſtem to the extent of three octaves with the gradation I have mentioned, we ſhould want ſix parts inſtead of four; and nothing would be more natural than this diviſion: not on account of its connection with the harmony, which does not carry ſo many different ſounds, but in regard to the voices, which are actually rather ill diſtributed. In effect, why ſhould there be three parts in a man's voice, and one only in that of a woman; of the totality of the latter contains as great an extent as the totality of the reſt? Let an interval of the ſharpeſt ſounds of the ſharpeſt female voices be meaſured, with the flatteſt ſounds of the flatteſt female voices. Let the ſame thing in a man's voice, and we ſhall not only find a ſufficient difference to eſtabliſh three parts on one ſide, and one only on the other; but this difference itſelf, if there is one, will be reduced almoſt to nothing. To judge clearly of this, we muſt not be confined to the mere examination of things ſuch as they are, but ſhould ſee what they might be, and conſider that cuſtom contributes much to the formation of voices on the character which we would give them. In France, where they are in want of baſſes, or counter tenors, and pay no attention to the baſs trebles, the voices of their men take different characters, and the female voices keep one only; but in Italy, where they look on a beautiful baſs treble as equal to the ſharpeſt voice, there may be found amongſt their women, very beautiful flat voices, which they call Contr' Alti, and very beautiful ſharp voices, which are called Soprani. On the contrary, in the voice of the recitative, they have only tenors; ſo that, if there is only one character of voice for women in our operas, in theirs there is only one character for that of men.

In

In regard to the choruſſes, the parts are generally ſo diſtributed in Italy, as in France, it is an univerſal cuſtom, but arbitrary, which has no natural foundation. Beſides, do we not admire in ſeveral places, and particularly in Venice, very beautiful muſic in grand chorus, executed by young girls only?

III. The too great diſtance of the voices between each other, which makes them all exceed their ſtaves, obliges ſeveral to be ſubdivided. By this means we divide the baſſes, into counter baſſes, and baſs tenors; the tenors into counter-tenors and concordants; the trebles into firſt and ſeconds; but in all this we perceive nothing fixed, nothing regulated on this principle. The general ſcheme of the French compoſers, is always to force the voice to make it ſcreem rather than ſing. 'Tis for this reaſon, that they appear at preſent to confine themſelves to the baſſes, and counter tenors, which are in the two extremes. In regard to the tenor, a part ſo natural to man, that it is called for excellence, the human voice, it is already baniſhed from our operas, where they forſake every thing natural; and by the ſame reaſon it will not be long before it is entirely extirpated from the French muſic.

We diſtinguiſh the voices by many other differences than thoſe from flat to ſharp. There are ſtrong voices, whoſe ſounds are bold and noiſy; ſweet voices, whoſe ſounds are ſoft and fluted; lengthened voices, which have a great extent; fine voices, full, juſt, and harmonious. Amongſt the many voices that I remarked in my ſhort excurſion to the metropolis of England, I obſerved ſeveral of the kind abovementioned. In what I have ſtiled the fine voice, the Scotch were particularly excellent. I ſhould not omit, tho' partiality might urge me, to pay that difference to a Foreigner which his merit demands, on which account, I muſt beg leave to make this ſhort digreſſion, to pay that reſpect to Mr. Keard's excellence, which the fullneſs, juſtneſs, and harmony of his voice may claim, without the ſmalleſt deviation from his modeſty, tho' that extends ſo far as to require a foreign pen to tell his merits to the world. There are alſo the contraries to all this; there are rough and heavy voices; there are voices flexible and eaſy; there are ſome, whoſe ſounds are unequally diſtributed to the one above, to others in the medium, to others below. There are equal voices alſo, which make the ſame tone be felt in their whole extent. It is the part of the compoſer to abſtract from each voice, whatever may be advantageous to his character. In Italy, where every time that an opera is introduced on the ſtage, it is always a new muſic, the compoſers are always careful to appropriate all the parts to the voices which ought to ſing them. But in France, where the ſame muſic continues for ages, each part muſt always ſerve to every voice of the ſame kind; and this is perhaps one of the reaſons, why the

the French airs, far from acquiring any perfection, become day by day, more diſguſting and tedious.

The moſt extended, the moſt flexible, the ſweeteſt, the moſt harmonious voice that ever exiſted, appears to have been that of the Chevalier Balthaſar Ferri, a Peruſian of the laſt age; a ſinger uncommonly excellent, whom every ſovereign in Europe retained in his court by turns, who was loaded with honours during his life, and whoſe glory and talents were celebrated after death by all the muſes of Italy. All the writings compoſed to the praiſe of this celebrated muſician, breathe delight and enthuſiaſm; and the agreement of all his contemporaries, ſhews, that ſo perfect and ſo uncommon talents were beyond envy. Nothing, ſay they, can expreſs the graces of his voice, or the eclat of his muſic. He had, in the higheſt degree, all the characters of perfection in every kind: He was gay, bold, lively, grave, tender, at will, and every heart gave way to his pathos. Among the infinity of ſtrong turns which he executed by his voice, I will cite one only. He aſcended and re-deſcended, in one breath, two full octaves in a continual trill, marked on all the chromatic degrees with ſo much juſtneſs, though without accompaniment, that if any one had ſtruck this accompaniment under the note where he was found, whether B flat or dieſis, they inſtantly perceived ſo juſt a concord, as ſurpriſed all the audience. We call voice alſo, the vocal and reciting parts for which a piece of muſic is compoſed: So we ſay a molet for a ſingle voice, inſtead of ſaying a molet in recitative; a cantata for two voices, inſtead of a cantata in duet, or with two parts. (Vide Duo, Trio.)

VOLTE. A kind of three timed air peculiar to a dance of the ſame name, which is compoſed of ſeveral turns and returns, whence it receives the name of volte. This dance is a kind of gaillard, and has not been uſed for ſome time.

VOLUME. The volume of a voice, is the extent or interval which is between the ſharpeſt and flatteſt ſounds which it can render. The volume of ordinary voices is about eight or nine tones: The moſt remarkable voices hardly ever paſs the two octaves in juſt and full ſounds.

---

# W.

WORDS. Is the name given to the poem which the compoſer ſets to muſic, whether this poem be ſmall or great, whether it be a drama or a ſong. The faſhion is to ſay of a new opera,

opera, that the muſic is tolerably good, but the words deteſtable. We might ſay the contrary of the ancient operas of Lully.

WORK. We ſay the third work of Corelli, the fifth of Vivaldi, &c. &c. But theſe titles are no longer in uſe. In proportion as muſic improves, it loſes theſe pompous names, by which our ancients thought they increaſed its merit.

---

# Z.

ZA. The ſyllable by which is diſtinguiſhed in church-muſic, the ſi B flat from the ſi natural, to which is left the name of ſi.

FINIS.